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PART XXXVII.

SELECTIONS

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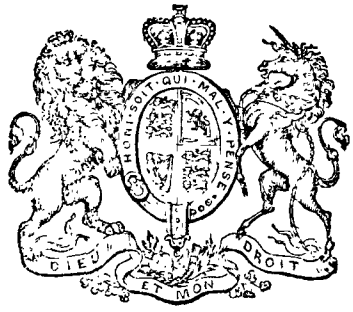

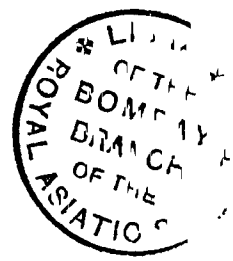

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Government Tea Plantations: the yield of the Factories, and the support given to private Capitalists, with suggestions for the improvement of Irrigation in the Dehra Dhoon.

4. The quantity of Tea prepared in the Factories was as follows :—

KOWLAGHIR FACTORY, DEHRA DHOON.

Green Teas.

Gunpowder,	---	lb	199	0	
Imperial Gunpowder,	---	„	182	0	
Hyson,	---	„	150	0	
Young Hyson,	---	„	386	0	
Hyson Skin,	---	„	817	0	
					1,734 0
Samples sent to Exhibition,			---	lb	21 0

Black Teas.

Souchong,	---	---	lb 4,846	0	
Fine Souchong,	---	---	„ 1,853	0	
					6,699 0
Pouchong,	---	---	„ 3,244	0	
					3,244 0
Bohea,	---	---	„ ---		3,284 0
			Total, lb		14,982 0

PAOREE FACTORY IN GURHWAL.

Black Teas.

Souchong,	---	---	lb 2,697	0	
Pouchong,	---	---	„ 2,850	0	
Bohea,	---	---	„ 4,700	0	
					10,247 0

BHIMTAL FACTORY IN KUMAON.

Black Teas.

Souchong,	---	---	lb 1,129	12	
Pouchong,	---	---	„ 64	12	
Bohea,	---	---	„ 75	0	
					1,269 8
			Total, lb		26,498 8

HAWUL BAUGH FACTORY IN KUMAON.

Green Teas.

Fine Green Tea,	---	---	lb 521	0	
Hyson Skin,	---	---	„ 880	7	
					1,401 7

Black Teas.

Souchong,	---	---	lb 2,707	8	
Bohea,	---	---	„ 2,952	8	
					5,660 0

AYAR TOLI FACTORY IN KUMAON.

Souchong,	---	---	lb 7,103	8	
Bohea,	---	---	„ 856	8	
					7,960 0
			Total, lb		41,519 15
			Shewing a Grand Total of lbs		41,519 15

Government Tea Plantations: the yield of the Factories, and the support given to private Capitalists, with suggestions for the improvement of Irrigation in the Dehra Dhoon.

5. But if there has been a small decrease in the quantity of Tea, it has been met by an increase in the produce of seeds, the yield being 2,220 maunds or 79 tons. Thus—

Kowlaghir Plantation,		---	---	Maunds	860	0
Paoree	do.,	---	---	„	260	0
Ayar Toli	do.,	---	---	„	370	0
Hawul Baugh	do.,	---	---	„	480	0
Bhimtal	do.,	---	---	„	250	0
				Maunds	2,220	0

6. Add to this the produce of the Khangra Plantation, maunds, 1,416 0

Maunds 3,636 0

and we have an outturn of 3,636 maunds or 130 tons.

7. This immense produce has enabled me to give great assistance to private Planters throughout the Kohistan of Kumaon, Gurhwal, Dehra Dhoon, and Punjab, as will be perceived by the appended Table, which shews that the large quantity of 2,513 maunds, or 89 tons of seeds have been distributed gratis to them.

8. In addition to this large quantity of seeds, large numbers of Seedling Tea Plants, amounting to two millions four hundred thousand have been, or are being, distributed. See Appendix B.

9. But, though the amount of seeds and plants at my disposal for distribution is immense, it comes far short of the indents received, new parties seeking other fields than those of the Kohistan of the North West Provinces and Punjab to carry on Tea cultivation. Thus, last season a Company established themselves at Hazareebaugh, and to them 15 maunds of seeds were given. To the Neilgherries, too, considerable quantities of seeds have been sent, through Dr. Cleghhorn, Superintendent of Forests, and by him I have been informed that Her Majesty's Right Hon'ble Secretary of State for India has sanctioned the engagement of some skilled native Tea-makers from the Government Factories, North West Provinces, in order to assist Tea Planters in the Madras Presidency to prepare Tea.

10. Financially the Tea Plantations may be thus considered :—

To lbs 41,519-15 @ Re. 1-8 per lb =	---	Rs.	62,279	14	6
2,200 maunds of seeds, @ Rs. 20 per maund, =	---		44,000	0	0
	Total,	Rs.	1,06,279	14	6
To expense of working the Plantations,	---		48,000	0	0
	Balance,	Rs.	58,279	14	6

11. To this must be added the value of Tea seedlings distributed, viz., 8,00,000

Seedlings @ 3 per 100 =	---	Rs.	24,000	0	0
Total Balance,		Rs.	82,279	14	6

Government Tea Plantations: the yield of the Factories, and the support given to private Capitalists, with suggestions for the improvement of Irrigation in the Dehra Dhoon.

12. Of the Teas prepared, lbs 16,000 are being packed for transmission to London for sale in the London market, and the remainder will be sold by auction at Almorah and Dehra Dhoon, in compliance with the orders of Government. Some delay in packing the Teas has occurred owing to the limited establishment of Carpenters, which, however, is being remedied.

13. By private Planters the demand for skilled Tea-makers, and Native Overseers to superintend their Factories and Plantation operations is great, and to many—such as Messrs. Dick, Berkeley, Troup, Smith, Knyvett, Mohur Singh, Ramnath, &c.,—skilled native workmen have been given.

14. *Chinese Tea-makers.*—Some of the Chinese Tea-makers, whose time of service had expired, have left Government employ and entered that of private parties, being tempted by a much higher rate of pay, and it has been found necessary to give an increase to the remaining Tea-makers. This, however, has been done without any increase to the establishment, the increased pay being more than met by that of the men who have resigned.

15. *Apprentices.*—Owing to the small allowance granted to them, the number of apprentices sanctioned by Government has never been quite filled up, and the number now on the establishment is three, two having left for better paid appointments. Their services have been found highly useful in the Plantations, and could not be dispensed without detriment to the works going on.

16. *Overseers.*—Owing to the numerous Tea Companies springing up throughout the Kohistan of the North West Provinces and Punjab, the demand for experienced European Overseers is increasing. The Overseer of the Kowlaghir Plantation in the Dehra Dhoon has been induced by offer of higher pay to leave Government employ and enter that of a private Company. The Overseer, too, of Ayar Toli Plantation has also left for a more lucrative appointment.

17. To conduct the duties at Kowlaghir in the Dehra Dhoon, I have deputed the Assistant Superintendent of Tea Plantations, Mr. James Thompson, and Mr. T. Mooney conducts the duties at Hawul Baugh and Ayar Toli. By both parties the works are carried on actively and efficiently.

18. The Paoree Plantation has been made over to Mr. J. Henry from the 1st April, and will form the subject of another communication.

19. To all the Tea Planters throughout the Kohistan and valleys of the North West Provinces I have sent a Circular, requesting information as to the quantity of land now brought under cultivation by them, &c., and as soon as I receive replies, I shall lay before you, for the information of the Hon'ble the Lieutenant Governor, a detailed statement, in order that His Honor may see how the cultivation is spreading.

20. From the Kalee in Kumaon to the Ravee in the Kohistan of the Punjab, the cultivation is being actively and energetically carried on, both by European and Native Capitalists; and the day is not far distant when we may expect to see Tea exported from the British Himalayas as its staple article of produce, and the Hills made lucrative, instead of as at present a drag on the revenues of the country.

21. In a few years the Dehra Dhoon, the most attractive spot in the North West Provinces to the European settler, will become a great Tea Garden. In every direction in it Tea plantations are springing up, and the two things

Government Tea Plantations: the yield of the Factories, and the support given to private Capitalists, with suggestions for the improvement of Irrigation in the Dehra Dhoon.

wanted to make them there universal are, in the Eastern Dhoon drainage, and the Western Dhoon water for drinking purposes and irrigation. The latter might be made available by anicuts being formed near the base of the Himalayas, or at such places where the drainage of the outer Himalayas escapes. It is a fact that, at the very time when water is most wanted from the Canals in the Dhoon, viz., in seasons of drought, or even in very dry weather, it can only be obtained in limited quantity. None of the Canals have feeders, and depend entirely on the supply of the water in the rivers from whence they take their rise. In the Dehra Dhoon the want of water in a dry season is much felt. In the small Canals the supply of water dwindles down to a few inches. Were a few reservoirs made, therefore, by forming anicuts at the places mentioned, the supply would always be kept up. Even to the great Canals anicuts made in the interior of the Himalayas on the courses of the great rivers would be of vast advantage, as by them the full supply of water could always be maintained. That natural anicuts existed on the great rivers Ganges, Jumna, &c., at a recent geological period, must be evident to every one who has followed for any distance the courses of these rivers in the interior of the Himalayas, and in our own time, or rather during the last twenty years, on the Indus two natural anicuts have been formed by the descent of glaciers into the bed of the river, and which has caused it at Attock to be easily fordable. This, however, only remained for a time, as the basis of the anicuts, being of a soluble nature, melted and gave way and allowed the waters to escape, carrying with them vast destruction to life and property. The river swept through and over the Chuch valley, levelling every village. At Attock, where it contracts, it rose fifty feet above its usual level, and the towns of Hanshealgur and Kalabagh, though built on the banks high above the usual level, were nearly ruined. The river remained fordable at Attock for three months before the catastrophe occurred, pointing out the feasibility of the undertaking were it desirable. To the Dehra Dhoon it would be a great boon, and the one thing needful to enable parties to inhabit waterless tracts in both the Western and Eastern Dhoons. There, too, to form his anicuts the Engineer has everything that he requires in abundance of limestone, sandstone, and quartz rock to form his dams, and the best lime available at a cheap rate to form his walls of any strength. There are no engineering difficulties to be experienced, as occur on the barren volcanic rock of Aden. But even there, and in a porous rock like lava, reservoirs of vast extent have been made, and in them a supply of water capable of supplying the town with a population of 30,000 for three years is kept.

I have, &c.

W. JAMESON, *Surgeon Major*,
Superintendent Botanical Gardens,
North Western Provinces.

Government Tea Plantations: the yield of the Factories, and the support given to private Capitalists, with suggestions for the improvement of Irrigation in the Dehra Dhoon.

APPENDIX A.

STATEMENT shewing Tea Seeds distributed from the Government Tea Plantations in Kumaon, Gurhwal, and Dehra Dhoon, during the Season 1861.

No.	Name of Parties.	Quantity of seeds distributed.	Total.	Remarks.
		Maunds.		
1	Major Ramsay, ---	57 0		
2	Mr. Lyall, ---	57 0		
3	Kundun Lall Shah, ---	10 0		
4	Captain Dansey, ---	40 0		
5	Major McPherson, ---	50 0		
6	Captain Batt, ---	50 0		
7	Colonel E. Money, ---	75 0		
8	General Richards, ---	50 0		
9	Colonel Drummond, ---	15 0		
10	Captain R. G. Mayne, ---	50 0		
11	Sealkote Tea Company, ---	75 0		
12	Captain Ellis, ---	40 0		
13	Captain Gwane, ---	20 0		
14	Jai Sah, ---	10 0		
15	Mr. McIver, ---	40 0		
16	Mr. F. A. Warrand, ---	30 0		
17	General Storey, ---	50 0		
18	R. Rich, Esq., ---	75 0		
19	Lieutenant C. Troup, ---	75 0		
20	Major Swetenham, ---	15 0		
21	Captain Hutton, ---	15 0		
22	Captain Murray, ---	20 0		
23	Mrs. Dick, ---	40 0		
24	Mr. Dick, ---	40 0		
25	Colonel Knyvett, ---	30 0		
26	Major Raikes, ---	30 0		
27	Nassun Tea Company, ---	50 0		
28	Captain Fitzgerald, ---	20 0		
29	Major Rind, ---	30 0		
30	Mr. Forrest, ---	40 0		
31	Colonel Smyth, ---	30 0		
32	West Hopetown Tea Company,	45 0		
33	Captain Battinge, ---	25 0		
34	C. B. Blair, Esq., ---	25 0		
35	Mr. Berkeley, ---	50 0		
36	Colonel Campbell, ---	10 0		
37	General Innes, ---	40 0		
38	Mr. W. Greig, ---	20 0		
39	Ramnauth, ---	8 0		
40	Nund Lall, ---	8 0		
41	Kuneyah Lall, ---	8 0		
42	Rajah Lall Singh, ---	8 0		
43	Fawkeer Dass, ---	5 0		
44	Pretum Dass, ---	5 0		
45	Maharajah of Pateeallah, ---	10 0	577 0	
	Seeds distributed to 20 Europeans from Holta, ---	600 0		
	And 301 Natives, ---	417 0	1,017 0	
	Grand Total, Maunds ---		2,513 0	

OFFICE OF SUPERINTENDENT, BOTANICAL GARDENS, N. W. P.: *Saharunpore, the 12th May 1862.*

W. JAMESON, *Surgeon Major*, Supdt. Botanical Gardens, North Western Provinces.

APPENDIX B.

Government Tea Plantations: the yield of the Factories, and the support given to private Capitalists, with suggestions for the improvement of Irrigation in the Dehra Dhoon.

STATEMENT shewing Tea Seedlings distributed from the Government Tea Plantations in Kumaon, Gurhwal and Dehra Dhoon, during the Season 1861-62.

No.	Name of Parties.	Number of Plants.	Total.	Remarks.
1	Lalla Ramnath, ---	50,000		
2	Kuneyah Lall, ---	30,000		
3	Thakoor Dass, ---	25,000		
4	Buctawur Singh, ---	25,000		
5	Nund Lall, ---	25,000		
6	Mrs. General Dick, ---	25,000		
7	J. McKinnon, Esq., ---	25,000		
8	Revd. L. Herron, ---	25,000		
9	Colonel Knyvett, ---	35,000		
10	Major McPherson, ---	35,000		
11	R. Rich, Esq., ---	100,000		
12	Lieutenant Troup, ---	100,000		
13	Colonel Money, ---	100,000		
14	Mr. Meakin, ---	100,000		
15	Captain Ellis, ---	100,000		
			800,000	
	Distributed from the Kangra Plantation to 11 European Planters, ---	1,100,000		
	10 Native ditto, ---	500,000		
			1,600,000	
	Total, ---		2,400,000	

OFFICE OF SUPERINTENDENT,
BOTANICAL GARDENS, N.W. P.,
Saharunpore, the 12th May 1862.

W. JAMESON, *Surgeon Major*,
Supdt. Botanical Gardens,
North Western Provinces.

ART. II.

Report on the Agra Medical School, for the year ending 31st March 1862.

REPORT ON THE AGRA MEDICAL SCHOOL, FOR THE YEAR ENDING 31ST MARCH 1862.

By G. R. Playfair, M. D.,
Superintendent Medical School, Agra.

The Winter Session closed on 31st March, and on the 1st April the Annual Examination commenced.

Of the sixteen* (16) senior Students, candidates for the Diploma of First Class Native Doctor, ten passed a very good Examination; one, who had been very ill during the winter, was remanded for three months, and five were wholly rejected.

Of the Junior Students, numbering sixty-eight (68), I have dismissed ten (10) whose replies did not reach the required standard, that is, the total value of whose replies did not amount to the number which I had fixed as the minimum to ensure success.

Several of these intend to continue their studies without receiving pay. This I am glad of, as among them are several really clever boys, who had been drawn into idle habits, and of whom it was necessary to make an example.

New Admissions.

Of Candidates for admission as Students there were forty-five (45.)

This seems a great falling off from the seventy (70) who came forward in November 1861, but more in appearance than in fact.

Of the seventy (70) in November, thirty (30) belonged to Agra, and I am always suspicious that residents of Agra only present themselves for the sake of the monthly stipend; of the forty-five (45) applications this year, only 9 belonged to Agra, *i. e.*, there were 36 candidates from a distance against 40 in November last.

The test for admission is a competent knowledge of reading and writing Oordoo, and first four rules of Arithmetic.

This year I made the Arithmetical test more difficult. I find that boys who are worst in that branch, are most backward in learning.

It may perhaps excite a smile when I describe the extent to which the severity of this test was increased; but the material I have to commence with is so raw, and Rs. 20 after three years' study is so small a prize, that I cannot expect a much better educated class of boys. Usually in trying the Arithmetical powers of the Candidates, some simple sums were given. For example — Multiply 85,579 by 24, or divide 9,64,038 by 47.

This year I gave a question, certainly simple enough, but requiring a little thought compared with the former method, and it had the advantage of at the same time testing the writing.

---

* Originally 17. One, who had studied three years, and was particularly quiet and attentive, turned out to have murdered an European during the mutinies at Banda.

The following was dictated:—" 526 pigeons were sitting on a tree; a little while after a number of pigeons, 36 times greater than those already present, came and joined them.

" 12 fowlers by spreading their nets entangled them all, except 324 which made their escape. The fowlers divided the pigeons equally among them. How many did each receive ?"

Of 21 Candidates admitted, 14 did the above sum correctly; 7 wrote well, but failed in the Arithmetic; the remainder were nowhere.

To the seven I gave a still more simple question, which they succeeded in doing:— " One evening 18 boys found Rs. 1,536. They concealed the money, intending to divide it equally in the morning, but a thief stole Rs. 1,356. How many were left, and how many did each boy receive?"

During the last Winter Session three boys had studied without pay. Of these two gained the necessary numbers and were admitted, making in all 23 admissions, as reported in my letter No. 8, of 15th April. Of the 21 new Students 8 are Hindoos, a larger proportion than has yet been admitted.

The result of the swearing-in of the Students has been so good that during the past year there has not been one case of desertion.

In reference to the necessity of a knowledge of Arithmetic, I may mention that, in the practical Examinations of 1861, I found so many of the replies imperfect, solely from deficient knowledge of this point, that, at the expense of the Students, I engaged an Arithmetical Teacher, who taught the boys for an hour a day for two months, until they were perfect in the first four rules.

Materia Medica Class.

In my Report for the year ending 31st March 1861, I mentioned that, notwithstanding the undoubted talent and zeal of the Teacher of Materia Medica, the results as shown by the Examinations of his class were unsatisfactory, and that I intended personally teaching the class during the summer of that year.

This I did daily, until prevented by other onerous duties when the Cholera Epidemic commenced.

Although unable to continue during the whole Session, I gained the object I had in view.

I modified in many respects the style of teaching, making it much more practical, and the result, I am glad to report, has been extremely gratifying.

Whereas in former years the boys were taught chiefly from written descriptions, and scarcely at all from seeing things done, now each boy at least once a week, with his own hands, assists in preparing the various compounds in use in our Hospitals, and from the raw materials procurable in the Agra Bazaar. They are also made to practice daily the art of prescribing, and the various signs and figures in use.

The following is a list of medicines actually made by the Senior Students during the last Winter Session:—

I need scarcely insist on the value of this kind of teaching, which will enable a native Doctor to replace any medicine which may be expended, and which otherwise might only be procurable, after considerable delay, from some distant Depôt.

Report on the Agra Medical School, for the year ending 31st March 1862.

List of Medicines prepared by the Students during the Winter Session of 1861-62,

Extract Rhubarb.	Acidum Gallicum.
Do. Chyretta.	Tinctura Opii.
Do. Liquorice.	Do. Digitalis.
Do. Stramonium.	Do. Assafœtida.
Hydrarg. C. Creta.	Do. Nux Vomica.
Pill Hydrargyri.	Ungt. Hydrarg. Nitrice.
Pulvis Kino Comp.	Do. Hydrargyri.
Do. Catechu Comp.	Do. Resenæ.
Do. Cinamomi Comp.	Do. Diacet Cupri.
Emplastrum Resenæ.	Aqua Distilliata.
Do. Plumbi.	Do. Cinamomi.

In the Examinations, besides questions on the regular course of Lectures, there were two sets of practical questions:—

1*st.*—Practical Surgery.
2*nd.*—Practical Pharmacy.

Ten questions on each; value of each question 20, purposely made double the value of questions on other branches to shew the importance I place on practical knowledge. I give the results in the Examination of the ten boys who have gained their Diplomas:—

TOTAL VALUE OF EACH SET OF QUESTIONS.

Practical Surgery.			*Practical Pharmacy.*		
4 gained,	---	200	3 gained,	---	200
4 Do.,	---	180	3 Do.,	---	180
1 Do.,	---	190	2 Do.,	---	160
1 Do.,	---	130	2 Do.,	---	140

The results among the Junior Students were still more satisfactory.

There is a subject I wish to bring to the notice of the Hon'ble the Lieutenant Governor.

I am occasionally asked whether I can supply Native Doctors for Native States.

I do not think they should be supplied, unless the cost of their education is repaid, or at least the stipendiary allowance.

Could not each State, according to its wants, send yearly to Agra one or more boys to be educated as Native Doctors, their yearly expenses, say Rs. 80, to be defrayed by the State which sends them ?

After a few years each State would possess a most useful class of subordinate medical servants.

It is essential that no boy be allowed more than Rs. 6 per mensem, that he may be on an equality with the Government Students.

I have mentioned Rs. 80, as the extra Rs. 8 will be required for books, &c. The yearly allowance should be sent in advance to the Superintendent of the School.

Models, &c., from England and France.

Of Rs. 1,500 placed at my disposal in the Spring of 1861 by the kindness of the Hon'ble the Lieutenant Governor, I have expended Rs. 1,252-13-7, for the

following articles, including freight from Europe, insurance, inland freight in Europe, inland freight Calcutta to Agra, leaving a balance of Rs. 247-2-5 to pay for other articles ordered.

List.

Articulations, real bones with artificial ligaments., } 10 specimens.
Ear, ten times natural size.
Circulation of Fœtus.
Female Pelvis and Diameters.
Fœtal Head and Diameters.
Complete Skeletons.
Hand and Foot articulated *a la* Beauchene.
Middle Section of Trunk.
Jaw, showing 1st and 2nd Dentition.
Jaw (adult), showing Nerves and Blood Vessels.
Set complete adult Teeth.
Ditto Infant Ditto.
Bones of Head, *a la* Beauchene.
Model of various Abdominal Hernias.
Model, with Fœtus, to illustrate Parturition.
Eight Wombs, with contents, at 1st, 2nd, 3rd, 4th, 7th, and 9th months of Pregnancy.
Two Wombs, showing Extra Uterine Pregnancy.
Model of Brain, takes into numerous pieces to show internal Anatomy.
Eye, large size, takes into numerous pieces to exhibit internal Anatomy.
Larynx, large size, opens to show organs of voice.
Complete set of (168) Specimens of Materia Medica as used in Edinburgh Medical College.
Specimens of all the Metals.
Book (folio) Plates, illustrating various stages and complications of Parturition.
Book (folio) Plates, illustrating Fractures and Dislocations.

The above have all arrived some months since, and with scarcely any damage worth noting.

I was at first rather afraid that the Wax Models would not bear the heat of India; but several which were procured by the Agra College from the same maker in Paris have stood the test of the voyage, and the heat of the summer of 1861 in Agra, and are as perfect in the minutest details as when they left the shop of the manufacturer.

The collection is a most useful one, and has been inspected with much interest by all the Medical Officers in Agra.

Some additions are required, but these can be made gradually, as soon as the contingent allowance of Rs. 100 per mensem is sanctioned.

G. R. PLAYFAIR, M. D.,

Supdt. Medical School, Agra.

Report on the Vaccine Operations in the Agra Division, for 1861-62.

ART. III.

REPORT ON THE VACCINE OPERATIONS IN THE AGRA DIVISION, FOR 1861-62.

By A. Christison, M. D.,

Superintendent of Vaccination, Agra Division.

The Vaccine Operations in the Agra Division for 1861-62 were commenced in the beginning of November 1861, and closed at the end of March 1862.

The number of Vaccinators was 26, with at first two Native Superintendents, but afterwards three.

Only eight of the Vaccinators were men of the previous year; the rest were new to the work, and before very long it became necessary to dismiss five of their number on account of inefficiency.

Thus, considering the inaccuracies of former years, pointed out by me in a previous communication,* the difficulties this year with a nearly quite new Establishment, the strength of which soon fell below the proper number, and the inexperience of the Native Superintendents, I trust it will not be a matter of surprise that the total number vaccinated have this year been few in comparison with other seasons.

* Letter to the Secretary to Government, North Western Provinces, No. 1, dated 24th October 1861.

It is very difficult to secure accuracy in the Returns, but I believe this has been attained for the present year, because, besides my personal inspections, I have strongly impressed on the Vaccinators that not mere numbers are required but rather good vaccine in the cases actually operated on.

The Vaccinators have in other years been under the impression that large numbers in their Returns would gain for them approval and advancement; and they became unscrupulous in this respect, competing with each other for the highest numbers and falsifying their registers.

The Districts visited this year have been Agra, Muttra, and Etawah, and also the Bhurtpore Territory.

An endeavour has been made to leave no village unvisited in the Pergunnahs the Vaccinators were sent to, so that the work might be thoroughly done and an interval of several years be allowed to elapse before a second visit.

Only a small portion of Etawah was visited, because as above stated it was considered desirable that the principal work should be done in the Agra and Muttra Zillahs.

The two Vaccinators in the Bhurtpore Territory were very successful, principally under the direction of Assistant-Surgeon Mott, at whose request I sent them.

The character of the vaccine has upon the whole been good, and the virus current at Agra was approved of by Dr. Bruce, Inspector General of Hospitals, at his inspection visit to Agra.

I am not quite satisfied that the vaccine equals that of other years, but this may be owing to the inexperience of the Vaccinators.

Thus, while one man under supervision would be working with good vaccine, another not under observation might be extending inferior virus.

The vaccine was started in November, partly from crusts sent by Mr. Pearson, Superintendent of Vaccine in Rohilcund and the Hills, and partly from lymph in capillary tubes received from Scotland.

I.

Total Vaccinations for each Month and District.

1861-62.

Months.	Agra.	Muttra.	Etawah.	Bhurtpore.	Total.
November 1861, ...	773	„	„	„	773
December „ ...	8,943	„	„	„	8,943
January 1862, ...	5,346	4,537	„	684	10,567
February „ ...	„	7,044	1,066	1,254	9,364
March „ ...	„	4,606	1,542	842	6,990
Total, ...	15,062	16,187	2,608	2,780	36,637

II.

Result of Vaccination in the Agra Zillah.

Months.	Successful.	Unsuccessful.	Doubtful.	Unknown.	Total.
November 1861, ...	286	390	37	60	773
December „ ...	4,535	2,418	601	1,389	8,943
January 1862, ...	2,267	907	164	2,008	5,346
February „ ...	„	„	„	„	„
March „ ...	„	„	„	„	„
Total, ...	7,088	3,715	802	3,457	15,062

Report on the Vaccine Operations in the Agra Division, for 1861-62.

III.

Result of Vaccination in the Muttra Zillah.

Months.	Successful.	Unsuccessful.	Doubtful.	Unknown.	Total.
November 1861, ...	„	„	„	„	„
December „ ...	„	„	„	„	„
January 1862, ...	1,741	884	388	1,524	4,537
February „ ...	3,277	1,304	378	2,085	7,044
March „ ...	2,116	877	168	1,445	4,606
Total, ...	7,134	3,065	934	5,054	16,187

IV.

Result of Vaccination in the Etawah Zillah.

Months.	Successful.	Unsuccessful.	Doubtful.	Unknown	Total.
November 1861, ...	„	„	„	„	„
December „ ...	„	„	„	„	„
January 1862, ...	„	„	„	„	„
February „ ...	372	294	44	356	1,066
March „ ...	796	288	77	381	1,542
Total, ...	1,168	582	121	737	2,608

V.

Result of Vaccination in the Bhurtpore Territory.

Months.	Successful.	Unsuccessful.	Doubtful.	Unknown.	Total.
November 1861, ...	„	„	„	„	„
December „ ...	„	„	„	„	„
January 1862, ...	398	126	1	159	684
February „ ...	773	235	6	240	1,254
March, „ ...	594	136	0	112	842
Total, ...	1,765	497	7	511	2,780

VI.

Total result in the Agra Division.

Months.	Successfull.	Unsuccessful.	Doubtful.	Unknown	Total.
November 1861, ...	286	390	37	60	773
December „ ...	4,535	2,418	601	1,389	8,943
January 1862, ...	4,406	1,917	553	3,691	10,567
February „ ...	4,422	1,833	428	2,681	9,364
March „ ...	3,506	1,301	245	1,938	6,990
Total, ...	17,155	7,859	1,864	9,769	36,637

VII.

Sexes of those Vaccinated.

Males.	Females.	Total.
17,172	19,465	36,637

VIII.

Ages of those Vaccinated.

6 Months.	6 Months to 1 Year.	1 Year to 2 Years.	2 Years to 3 Years.	3 Years to 4 Years.	4 Years to 5 Years.	5 Years to 10 Years.	Total.
3,223	7,259	8,528	5,212	4,728	2,725	4,962	36,637

IX.

Castes or Occupations of those Vaccinated.

Chumar, ...	9,383	Naye, ...	546	Durzee, ...	162
Thakoor, ...	5,300	Tailee, ...	480	Kayt, ...	148
Brahmin, ...	3,680	Goojur, ...	394	Jogee, ...	142
Jât, ...	3,072	Dhobee, ...	378	Chirimar, ...	110
Mahomedan, ...	2,138	Nudaff, ...	324	Dhanook, ...	94
Bukkal, ...	1,719	Khutick, ...	288	Cheepee, ...	91
Kolee, ...	1,390	Rajpoot, ...	280	Bairagee, ...	91
Kahar, ...	934	Lohar, ...	259	Bhât, ...	77
Kachee, ...	871	Mullah, ...	252	Munhar, ...	66
Gudurya, ...	842	Soonar, ...	245	Mehtur, ...	61
Koombar, ...	728	Christian, ...	179	Meena, ...	51
Lotha, ...	663	Mollee, ...	176	Various Castes in small number,	196
Nujjar, ...	652	Bhurjee, ...	175		

Report on the Vaccine Operations in the Agra Division, for 1861-62.

In the foregoing returns it will be seen that the columns for unknown cases are large. There are several reasons for this.

The Vaccinator may find the family he wishes to visit has left the village for a time, or as is very common, he cannot persuade the people to consent to an inspection of the result; or he himself is moved to another district, and time which is very short at the best for successful vaccination, would be lost were he to return to inspect.

Many of the unknown cases were no doubt successful, and if this could have been ascertained the numbers in the column for successful cases would have presented a better appearance.

An attempt has been made to trace the results of vaccination in previous years, and 255 children, whose vaccine marks had disappeared, have been re-vaccinated, 134 of these successfully; but it has not been easy to find such cases, as there were no village registers to refer to, and the people were unwilling to give information.

There is one most important point on which I believe much fallacy exists, and that is the proportion of successful cases.

It has been before stated by the late Dr. Currie and myself that there are many unsuccessful cases—owing to the inexperience or carelessness of the Vaccinators, and to the conduct of the persons in charge of the children operated on, or of the children themselves.

The better classes will attend to the instructions given them to carefully protect the vaccine vesicle, but the lower orders are too apt to scratch and destroy the vesicle as soon as it is formed. Very often the skin is so hard from exposure to the weather that the virus takes no effect.

This year I consider the number of successful cases below the average, and this is due to the inexperience of certain of the Vaccinators.

I believe that 60 or 70 per cent. of successful cases is all that can be expected in present circumstances.

I have seen other Returns in which the success is given as 90 per cent., but this does not accord with my observation. It would require a careful selection of children, willing co-operation of the parents, and very skilful Vaccinators to attain such a result.

That there should be so many unsuccessful cases is unfortunate, because the people do not understand that they are thus not protected from Small-pox: they in general believe that the simple insertion or scratching of the lancet is sufficient, and should Small-pox occur in such a case their faith in the operation is shaken.

I have this year made trial of the vaccine needle-instrument for scratching the virus into the skin. It produces a very good and large vesicle, and I would therefore always use it; but as the children scratch the vesicle when formed, I found the arm not unfrequently ulcerated in this case owing to the size of the surface injured.

I also found a tendency to ulceration with this instrument when the weather was becoming hot. It therefore appears to be best suited for the coldest months.

The Vaccinators themselves always use the ordinary bleeding lancet in preference, unless prevented. They will even use the round lancet end of

the needle-instrument in preference to the needle points. They do this because it is easier to insert the lancet under the often hardened skin than to scratch through it with the needles.

I endeavour to make them use both instruments in the cases most suitable for each.

I have brought into use capillary tubes for conveying fluid vaccine on a larger scale than formerly, as there is no doubt of their efficacy and great convenience in transmitting virus from one place to another.

I wished thus to obviate the necessity of taking children from one village to another for the sake of the fresh lymph, as that is an inconvenience to the people, and not unfrequently cannot be done.

I have to a certain extent succeeded; but the manipulations required being delicate, only a few Vaccinators can as yet fill the tubes properly. They will require further instruction next season.

I do not think any other form of vaccine is necessary, except cruets and capillary tubes of fluid virus.

AGRA:
The 21st May 1862.

A. CHRISTISON, M D.,
Superintendent of Vaccination,
Agra Division.

Report on the working of the Botanical Gardens at Seharunpore, during the year 1861.

ART. IV.

REPORT ON THE WORKING OF THE BOTANICAL GARDENS AT SEHARUNPORE DURING THE YEAR 1861.

By Dr. W. Jameson, *Surgeon Major*,

Superintendent Botanical Gardens, N. W. Provinces.

In forwarding, for the information of the Hon'ble the Lieutenant Governor, a detailed statement shewing the distribution of Plants and Seeds from the Botanical Garden, Seharunpoor, during the last season, I beg to offer a few brief observations on the manner in which the works have been carried on :—

2. From March 1st to 21st November I was absent on medical certificate, during which time my duties were actively carried on by Doctor J. L. Stewart.

3. The large number of Plants and parcels of Seeds distributed will, I trust, prove that the department has been energetically conducted. From Calcutta to Peshawur, there is scarcely a Horticultural or Agricultural Institution which has not more or less been benefited by the receipt of Plants or Seeds. By the abstract appended it will be perceived that 1,15,437 Fruit trees, 58,058 Timber trees and Flowering Shrubs, and 1,616 parcels of Seeds, were during the season distributed to applicants.

4. Amongst the chief applicants, we may mention the Superintendents of the Public Gardens, Calcutta, Madras, Neilgherries, Lucknow, Umritsur, Lahore, Jullunder, Deyrah Dhoon, Umballah, Peshawur, &c; the Commanding Officers of Her Majesty's Regiments and Batteries from Benares to Peshawur; Officers in charge of districts; Officers in charge of Jails, to all of whom liberal supplies of Seeds or large numbers of Plants have been given. To several of the chief public Institutions and many private individuals in Britain large supplies of Pine and other hardy timber Seeds have been distributed. To Dr. Forbes Watson, the Examiner of Indian Vegetable products at Her Majesty's Indian office, London, large supplies of coniferous Seeds have been given to meet the great demands for them which still prevail in Britain, the Deodar among the number, and one of the handsomest trees in the Pine tribe, being still as popular with the public as when it was first introduced. To many private establishments as Messrs. Low, of Clapton; Messrs Veitch & Co., Exeter, &c.,—I have also distributed Pine and other hardy Seeds on the understanding that they would reciprocate. A similar arrangement has been made with several public Institutions. Nor have native sirdars and gentlemen throughout the North West Provinces been neglected, as is shewn by upwards of a hundred requisitions from them for large supplies of Seeds and Plants having been complied with.

5. In return for our Seeds, the Superintendent Botanical Garden, Calcutta, has supplied us with three ward-cases filled with Plants desiderated by the Gardens, North West Provinces. To His Excellency the Governor of the Ionian Islands, at the request of Dr. Hadaway, H. M's. Inspector General of Hospitals, Bombay, a fine collection of Pine Seeds; and for the Italian Minister Count Recasoli, two large parcels of Pine Seeds have, by desire of Her Majesty's Secretary of State, been forwarded. In return for the Seeds, the Governor of the Ionian Islands has forwarded a wardian-case of young Olive Trees (*Olea Europa.*)

6. To meet the immense demand for Seeds for Soldiers' Gardens, a new garden, sanctioned by the Hon'ble the Lieutenant Governor, has been formed at Chejowree, in the Himalayas, and by its assistance indents to an unlimited extent can now be supplied.

7. In my last Report I stated that many kinds of Seeds, when acclimatized in this country, degenerated in two or three seasons, particularly those belonging to the umbelliferous and cruciferous families; and in order to keep up the character of the Gardens for distributing good Seeds, I brought to the notice of the Hon'ble the Lieutenant Governor that it would be necessary to import at intervals fresh Seeds from England, the Cape, or America to renew the stock. Concurring with this view, the Right Honorable the Governor General in Council moved Her Majesty's Secretary of State for India to order a supply to be sent, and when in England I was requested to mention the kinds of Seeds most required. I therefore furnished Dr. Forbes Watson with a list, and by him, acting under the orders received from the India Office, three cases of Seeds were forwarded to Calcutta, and have reached Seharunpoor in excellent condition, some of which have been sown and others forwarded to the Hill Gardens. To a Parisian house,—Vilmorin, Andriena, and Co.—I have also forwarded an extensive collection of Vegetable and Flower Seeds in exchange for Pine and other hardy Hill Seeds, which have also assisted to stock the Gardens with good Seeds.

8. *Enroute* to England I visited the Island of Malta. Here I find growing in the most barren, stony, and dry places the Carob tree (*Gertanea Sitayna*), which Seeds immensely. By the poorer classes it is ground and mixed with grain, and when baked in the oven it is anything but disagreeable. In seasons of scarcity it is, therefore, much used by the poorer inhabitants. It, too, is constantly given to horses and mules, in the proportion of one measure Carob Beans to two measures of Barley, and on this food they both work and thrive well. I have, therefore, brought to India a large quantity of Seed, and have raised a number of Plants in order that its value may be tested in the dry places of the North Western Provinces. On the Islands, too, I also found a species of clover growing everywhere, and far superior to any green fodder met with in India. It is there named *sullah*, and is a species of hedysarum. The H. coronarium of it I have also brought a quantity in order to have it tried. In Malta it grows to a height of from four to five feet, and yields an immensely heavy crop; forms green forage for horses and mules, and is also dried and used as hay in the winter. When in full flower in April and May, it presents a very fine appearance.

9. Flax Seeds.—In my letter to you No. 65, dated 1st February, I mentioned the steps taken by me when in England to procure Flax Seeds. In compliance with the orders contained in your letter No. 274, dated 14th March 1861, I applied to Mr. H. Field, in St. Petersburgh, to procure for me the Seeds from Livonia, and by him a ton and a quarter of fresh Seeds were obtained from Riga, packed in double hempen bags, which were again covered with buss mats to protect them from rain, and shipped to London. On arrival there, they were, by orders of Her Majesty's Secretary of State for India, sent by the Overland Route to Calcutta, from whence they were forwarded by steamer and bullock-train to Seharunpoor. Before their arrival the season had far advanced. I, therefore, fearing that from this cause the seed might not germinate freely, only sowed half of the quantity imported. But my caution was unnecessary, as every seed germinated, and I reaped as fine a crop in April as any that I had seen last season in Ireland, proving the value of imported seeds and the importance of having them sent by the Overland Route. By this route, owing to the changing of the packages from the vessel to the rail at Alexandria, and from the rail to the vessel at Suez, the seeds are constantly exposed to the air, and thus reach Calcutta in good order. Seed, on the other hand, sent in ships by the Cape

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Route, owing, no doubt, to heating when packed in the hold, invariably fail to germinate, as was the case with the fifteen tons of Flax Seeds sent by the Indian Flax Company round the Cape to Kurrachee, and then to Sealkote. When I visited, by orders of the Punjab Government, Sealkote in March last, I found all these Seeds lying in godowns and perfectly useless, barring for making oil and cake. To encourage the cultivation in the Punjab and indemnify the Flax Company for the loss sustained, Her Majesty's Secretary of State for India has granted to the Company Rs. 10,000 for two years, conditionally that they raise money to carry on operations for three consecutive years. It is not my intention at present to ask any further support from the Hon'ble the Lieutenant Governor in the form of European scutchers from Her Majesty's Regiments, as the crop raised is only one half of the quantity which was proposed to be grown. I shall, therefore, have the Flax Straw carefully stacked, the Seeds having already been removed, and prepare it as soon as I have a quantity in hand to justify me to make application to Government for aid in preparing. All the Seed therefore of the present crop will be preserved for my own purposes, and in the ensuing season I shall be prepared to issue to private parties Seeds in quantity. The Rowan Flax-Scutching machine, too, has not yet reached Seharunpoor, and may be expected in the course of the month, which will assist greatly the operations in preparing the Flax. To Mr. Macleod, Financial Commissioner of the Punjab, I forwarded a small sample of the Flax grown this season, in order that it might be examined by Mr. Wightman, which was done, and pronounced by him to be very fine Flax Straw, and admirably fitted for making fibre for the home market. To make, however any speculations would be premature at present; I may, however, state that the importation of Seed could not have been more successful. In the Punjab, his Honor the Lieutenant Governor has sanctioned an expenditure of Rs. 500, for prizes to be distributed by the District Authorities for the best Flax Fibre Straw produced by native cultivators as soon as acclimated Seeds can be distributed to natives of the North Western Provinces. I shall respectfully solicit the Honorable the Lieutenant Governor to countenance in a similar manner the cultivation in his kingdom.

10. But Flax is not the only fibre which deserves the attention of Government. There are many others. No where, however, is there a collection of the raw products of the North Western Provinces to be met, and it is only on pressing and extraordinary occasions, such as an European war causing a dearth to the British looms, that attention is paid to the fibres and fibrous stuffs of India. Attached to all the great public Botanical collections in Europe, there is now an economic Museum, in which are exhibited all the raw materials belonging to the vegetable kingdom, in the form of different kinds of woods, fibres, seeds, fruit, oils, gums, resins, sugars, food-yielding substances, medicinal substances, dyes, or in other words, a collection not only interesting but practically useful to parties of all professions. In India, no where does such a collection exist, and no where could a complete one more easily be brought together, provided that it is countenanced by Government, as in the agency at their command, there is a band of Officers, who, for intelligence and efficiency, are not to be surpassed in any country, and who would gladly assist in bringing together the products of their districts. Were samples of these products all contained under one roof, not only would parties be able to compare the products of different districts with one another, but also they would be able to bring to light such as would be useful in the arts and fitted for the looms of the mother country. For locating such a collection the Seharunpoor Garden is admirably fitted, as from the Officer in charge it would always receive the attention that it deserves, and he would always have an opportunity of bringing to the notice of the public valuable materials. To the Home manufacturer, the Sunns, Patsuns-Sunnees, which everywhere abound, and which are so admirably fitted for the British looms, particularly those of Dundee, Brechin, &c., at present are unknown. To the British manufacturer our Boehmaria, Bunhinie, Daphne, Gterculia, Marsdenia, Aloe, fibres are also unknown. The same

was the case with Bengal Jute a few years ago, but which now forms a trade of tens of thousands of tons, giving employment to thousands of individuals. To bring together such a collection a proper building for its accommodation alone is wanting, and every Officer would willingly and readily collect the products of his district when made cognizant of the object Government had in view. To erect such a building there is an excellent vacant space in the garden available for the purpose. All, therefore, that are wanting are Funds.

11. For such a collection a pucka building with flat roof would be necessary, and one might be erected at an expense of from Rs. 4,000 to 5,000. This small sum would soon be returned to the country a hundred-fold by the publicity that it would give to its raw products. I would, therefore, respectfully solicit the countenance of the Honorable the Lieutenant Governor to such an undertaking.

12. But it might be urged that the natives would treat such a collection with indifference. Twenty years ago such remarks were made regarding the working classes in Britain, and such collections were unknown. Now every second-rate town has its economic Museum, and the great collection in the Botanical Gardens at Kew, distant some thirty miles from London, is the *facile princeps* of museums of industry, and daily frequented by thousands in search of information and recreation.

13. Let such collections be formed in this country, and they would tend to interest the mind of the native in its products, and give those anxious and willing to turn the raw products to good account an opportunity of examining them. Ignorant and apathetic natives are, but still they are ever open, at least the better informed classes, to the advancement of their own interests. By forming an Industrial Museum, Government would give an opportunity to parties to point out the products that would meet with a ready sale in the Home markets, and would stir up a spirit of enquiry at present latent, and which only requires ocular demonstration and example to be developed.

14. As connected with these Gardens, I may briefly mention the Government Tea Plantations, which have formed the subject of another communication. From them there have been distributed to Tea Co mpanies and private planters, during the season, the immense quantity of 89 tons of Seeds, and two millions three hundred thousand seedling tea plants, thus scattering this important plant broadcast over the Kohistan of the North West Provinces and Punjab.

15. For the Medical Department of the Public Service large supplies of Extract and dried leaves of *Hyoscyamus* have been prepared, viz., lbs. 244-13 of the former, and lbs 64 of the latter. The following Medical substances have also been forwarded to the Chief Medical Store-keeper and Medical Depôt-keepers, in compliance with requisitions from the Secretary to the Chief Inspector General of Hospitals :—

Tubers of Atees (*Aconitum heterophyllum,*)	lbs. 460
The powder of Kaimaillee (*Rottlera tinctoria,*)	lbs. 420
Roots of the Berberry berberies.	lbs. 130

16. CONSERVATORY. The glass sanctioned by the Hon'ble the Lieutenant Governor for the roof of the conservatory was procured by me in London, and is daily expected at Saharunpoor. When it arrives, the building will as soon as possible be repaired.

17. To the Gardens many acquisitions have been made, for which I am indebted to Dr. Anderson, Officiating Superintendent, Botanical Gardens, Calcutta; Dr. Forbes Watson, Inspector of Indian Vegetable Products, London; Dr. Cleghorn, Superin-

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tendent of Forests, Madras; and Captain Pearson, Superintendent of Forests, Central India.

18. In conclusion, I beg to state that the head Gardener, Mr. W. Bell, selected by Professor Balfour, of Edinburgh, for the Seharunpoor Gardens has joined, and through his aid I trust to add to their efficiency and usefulness.

I have, &c.

W. JAMESON, *Surgeon Major*,
Superintendent, Botanical Gardens,
North Western Provinces.

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Seharunpoor, during the year 1861.

Month and Date.		Name of Parties applying and supplied.	Fruit Trees.	Timber, Shrub and Flower Plants.	Parcel of Seed.	Remarks.
		January 1861.				
January	5th	Hadur Hosain, Seharunpore, ...	156	60	0	Fruit and shrub plants.
		Mr. J. Powell, ditto, ...	34	2	0	Ditto ditto.
		W. Wynyard Esq., Judge of Seharunpore, ...	0	58	0	Flowering shrubs.
	8th	Major Ramsay, Commissioner of Kumaon, Almorah, ...	0	0	3	Vegetable seeds.
		Ditto, ditto, ...	0	0	3	Flower seeds.
		Ditto, ditto, ...	0	0	1	Tallow tree seeds.
		Major R. A. Ramsay, Commanding Kumaon Battalion, Almorah, ...	0	0	2	Vegetable and flower seeds.
		The Overseer Government Tea Plantation, Hotta, Kangra, ...	0	0	1	Tallow tree seeds.
	10th	Capt. G. C. Bloomfield, Commanding 23rd P. I., Morar, Gwalior, ...	0	0	2	Vegetable and flower seeds.
		Dr. G. Peacock, 27th Regt. Morar, Gwalior, ...	0	0	2	Ditto ditto.
		Reverend J. B. D. Aguilar Chaplain, Roorkee, ...	0	63	0	Flowering shrubs.
		Syed Mohummed Khan, Seharunpore, ...	4	141	0	Fruit, shrub, and flower plants.
	13th	Mr. Powell, Seharunpore, ...	0	59	0	Flowering shrubs.
	16th	Mr. G. E. Powell, Ditto, ...	0	29	0	Ditto ditto.
	18th	Mohumud Husson, Ditto, ...	33	0	0	Fruit trees.
		W. Wynyard, Esq., Ditto, ...	0	0	1	1 seer Lucerne seeds.
	19th	W. Elphinstone, Esq., Deputy Commissioner, Jullunder,...	586	75	1	Fruit and shrub plants; also Pine and Deodar seed.
		W. Wynyard, Esq., Judge of Seharunpore,	60	110	0	Fruit and shrub plants
		Carried over, ...	873	597	16	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Seharunpoor, during the year 1861.—(Continued).

Month and Date.		Name of Parties applying and supplied.	Fruit Trees.	Timber, Shrub and Flower plants.	Parcel of seed.	Remarks.
		Brought forward, ...	873	597	16	
January	19th	Mr. J. Powell, Deyrah Dhoon, ...	8	0	0	Mangoe plants.
	21st	Revd. J. R. Campbell, Seharunpore, ...	0	13	0	Flowering shrubs.
	26th	Baboo Tara Chunder, Sub-Assistant Surgeon, Seharunpore,	0	20	0	Rose plants.
		Henry Cope, Esq., Umritsur, ...	23,000	0	0	Mulberry cuttings.
		W. Wynyard, Esq., Judge of Seharunpore, ...	4,130	0	0	Strawberry and other fruit plants.
	28th	Colonel C. Read, C. B, Commanding at Deyrah Dhoon,	0	0	1	Pine and Hill seeds.
		Colonel A. S. Waugh, Deyrah Dhoon, ...	0	0	1	Ditto ditto.
		Captain Montgomery, ditto, ...	0	0	1	Ditto ditto.
		Revd. M. Maddock, ditto, ...	0	0	1	Ditto ditto.
	29th	Lieut. F. B. Norman, Deputy Assistant Quarter Master General of the Army, Meean Meer, for Soldiers' Gardens, ...	0	0	8	Country vegetable and flower seeds.
		Lieut. Col. H. Blumsden, Commanding at Murdan,	0	0	1	Timber seed.
		Mr. J. Gibbins, Deputy Collector, Hydrabad, Scind, ...	0	0	2	Ditto ditto,
		Ditto, ditto, ...	0	0	2	Fruit and shrub ditto.
		Mr. C. B. Carbery, Assessor, Deyrah Dhoon, ...	0	0	1	Lucerne seed.
	0	Dr. J. Hutchinson, for Public Garden, Deyrah Dhoon,...	0	358	0	Flowering shrubs.
		Ditto, Ditto, ...	0	213	1	Shrub plants and Timber seeds.
		Total, ...	28,011	1,210	35	
		February 1861.				
February	1st	The Joint Magistrate of Seharunpore, for Demola river,...	0	30	0	Timber trees.
	2nd	J. Vans Agnew, Esq., C. S., Seharunpore, ...	0	0	1	Lucerne seed.

	Lieutenant D. G. Air, Assistant Engineer, Thanasur, ...	2,000	0	3	Strawberry plants, and Timber, shrub, and flower seeds.,
	The Joint Magistrate of Seharunpore, ...	0	40	0	Timber trees.
	Major Mundy, Paymaster, Umballa, ...	98	08	0	Fruit and shrub plants.
4th	Major H. A. Brownlow, Supdt. E. J. Canal, Seharunpore,	129	0	0	Fruit trees.
	The Joint Magistrate of Seharunpore, ...	0	30	0	Timber trees.
5th	Ditto, ditto, ditto, ...	0	30	0	Ditto.
6th	Mrs. S. Bond, Seharunpore, ...	0	25	0	Flowering shrubs.
	The Joint Magistrate of Seharunpore, ...	0	30	0	Timber trees.
7th	Ditto, ditto, ditto, ...	0	30	0	Ditto.
8th	Captain W. Mylne, Deputy Assistant Commissary General, Umballa, ...	0	470	1	Arrowroot and Artichoke bulbs, and vegetable seeds.
	Dr. J. Hutchinson, C. S., Deyrah Dhoon, ...	6	3	0	Fruit and shrub plants.
	Sahub Singh, Moonshee of Raja of Nabha, ...	135	62	0	Fruit, shrub, and flower plants.
9th	Lieutenant W. C. MacDougall, Stud Department, Seharunpore, ...	0	0	0	2 Seers Lucerne grass.
	Mr. M'Kenzie, Camp Seharunpore, ...	0	8	2	Shrub plants, also vegetable and flower seeds.
	Mrs. Colonel Jamieson, Deyrah Dhoon, ...	0	1	0	White tea rose.
	Mr. H. Billings, Boolundshahur, ...	67	163	0	Fruit, shrub, and flower plants.
10th	Major J. Stevens, Invalid Establishment, Deyrah Dhoon,	12	466	0	Fruit, timber, shrub, and flower plants.
	Major Ramsay, Commissioner of Kamaon, Almorah, ---	0	262	0	Flowering shrubs.
12th	Major J. Wemyss, Deyrah Dhoon, ---	50	5	0	Fruit and Coffee plants.
	Mr. James Morgan, Seharunpore, ...	0	80	0	Flowering shrubs.
14th	Gunga Ram Malie, Jugadree, zillah Umballa, ...	68	8	0	Fruit and shrub plants.
	Dr. J. Hutchinson, C. S., Deyrah Dhoon, ---	6	10	0	Ditto Ditto.
15th	Major Barlow, ditto, ...	108	0	0	Fruit trees.
	Ram Nath, ditto, ---	50	0	0	Malda Mangoe plants.
	Nund Lall, ditto, ...	50	0	0	Ditto Ditto.
	Carried over,	2779	1,861	7	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Seharunpoor, during the year 1861—Continued.

Month and Date.		Name of Parties applying and supplied.	Fruit Trees.	Timber, Shrub and Flower Plants.	Parcel of Seed.	Remarks.
		Brought forward, ...	2,779	1,861	7	
February	18th	Captain Montgomerie, Camp Seharunpore, ...	0	0	4	Vegetable and flower seeds.
		Major J. W. Rind, Dehra, ...	164	0	0	Fruit trees.
	19th	Doctor Ross, Travancore, Madras, ...	0	0	4	8 Seers Tea seeds.
		D. F. MacLeod Esquire, Lahore, ...	0	0	12	24 Seers Stillingia seed.
		Mrs. General Dick, Dehra Dhoon, ...	60	0	0	Fruit trees.
	21st	T. A. Warrand Esquire, Almorah, ...	0	0	2	English vegetable and flower seeds.
		Dr. Cleghorn, Superintendent Botanical Gardens, Madras,	0	0	1	Pine and Deodar seed.
		Mr. W. G. M'Ivor, Superintendent Botanical Horticultural Gardens, Ootacamund, Neigheries, ...	0	0	1	Ditto ditto.
		Doctor Hadaway, Her Majesty's Inspector General of Hospitals, Bombay, ...	0	0	2	Ditto ditto.
		Doctor T. Thomson, Superintendent Botanical Gardens, Calcutta, ...	0	0	1	Ditto ditto.
		Major J. Wemyss, Deyrah Dhoon, ...	0	0	1	Vegetable seeds.
		Captain T. Slater, Her Majesty's 82nd Regiment, Shahjehanpore, ...	0	0	2	Flower and creeper seeds.
		The Officer Commanding Her Majesty's 94th Regiment, Nowshera, for Soldiers' Gardens, ...	0	0	6	Country vegetable seeds.
		Ditto, ditto, ditto,	0	0	3	Flower seeds.
		Ditto, ditto, ditto,	0	0	3	Creeper do.
		Ditto, ditto, ditto,	0	0	1	Indian Corn.
		The Officer Commanding Right Wing Her Majesty's 82nd Regiment, for Soldiers' Gardens, Moradabad, ...	0	0	5	Country vegetable seeds.
		Ditto, ditto, ditto,	0	0	3	Ditto flower do.
		Ditto, ditto, ditto,	0	0	2	Ditto creeper do.
		Ditto, ditto, ditto,	0	0	1	Indian corn.
		Ditto, ditto, ditto,	0	0	1	Grass seed.
		Captain Curtis, Umballa, ...	0	310	0	Flowering shrubs.

22nd	Dr. C. Hathway, Lahore, ...	0	0	1	Rye grass seeds.
	The Officer Commanding 1st Battalion Her Majesty's 19th Regiment, Benares, for Soldiers' Gardens, ...	0	0	4	Country vegetable seeds.
	Ditto, ditto, ditto,	0	0	2	Ditto flower do.
	Ditto, ditto, ditto,	0	0	2	Ditto creeper do.
	Ditto, ditto, ditto,	0	0	1	Indian corn.
	The Officer Commanding Her Majesty's 42nd Royal Highlanders, Bareilly, for Soldiers' Gardens, ...	0	0	4	Country vegetable seeds.
	Ditto, ditto, ditto,	0	0	2	Ditto flower do.
	Ditto, ditto, ditto,	0	0	2	Ditto creeper do.
	Ditto, ditto, ditto,	0	0	1	Indian corn.
	The Officer Commanding Her Majesty's 1st Battalion 7th Royal Fusiliers, Peshawur, for Soldiers' Gardens, ...	0	0	6	Country vegetable seeds.
	Ditto, ditto, ditto,	0	0	3	Ditto flower do.
	Ditto, ditto, ditto,	0	0	3	Ditto creeper do.
	Ditto, ditto, ditto,	0	0	1	Indian corn.
	The Officer Commanding Her Majesty's 82nd Regiment of Foot, Shahjehanpore, for Soldiers' Gardens, ...	0	0	5	Country vegetable seeds.
	Ditto, ditto, ditto,	0	0	3	Flower do.
	Ditto, ditto, ditto,	0	0	2	Creeper do.
	Ditto, ditto, ditto,	0	0	1	Indian corn.
	Ditto, ditto, ditto,	0	0	1	Grass seed.
23rd	Lieutenant T. Murphy, Acting Quarter Master, Her Majesty's 46th Regiment, Jullunder, for Soldiers' Gardens,	0	0	4	Indian vegetable seeds.
	Ditto, ditto, ditto,	0	0	2	Ditto flower do.
	Ditto, ditto, ditto,	0	0	2	Ditto creeper do.
	Ditto, ditto, ditto,	0	0	1	Indian corn.
	The Officer Commanding Convalescent Depôt, for Soldiers' Gardens, Nynee Tal, ...	0	0	3	Country vegetable seeds.
	Ditto, ditto, ditto,	0	0	2	Ditto flower do.
	Ditto, ditto, ditto,	0	0	1	Creeper do.
	Ditto, ditto, ditto,	0	0	1	Indian corn.
	J. Blechynden, Esquire, Secretary, Agricultural and Horticultural Society, Calcutta, ...	0	0	1	Deodar seed, 10 seers.
	Colonel MacDonald, Poosah, ...	0	2	0	Flower plants.
25th	Mr. O. W. White, Huzarah, Abbottabad, ...	0	0	3	Vegetable, flower, and creeper seeds.
	Mr. E. Hughes, Ferozepore, ...	0	0	1	Strawberry seed.
	Carried over, ...	3,003	2,173	127	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Seharunpoor, during the year 1861—(Continued.)

Month and Date.		Name of Parties applying and supplied.	Fruit Trees.	Timber Shrub and Flower Plants.	Parcel of Seed.	Remarks.
		Brought forward, ...	3,003	2,173	127	
February	25th	L. G. Lance, Esquire, Cawnpore, ...	0	0	2	Shrub and creeper seeds.
		Captain C. H. Scott, Morar, Gwalior, ...	0	0	3	Vegetable, flower, and creeper do.
		Captain C. A. Reid, 20th Regiment, Roorkee, ...	0	0	1	Vegetable seeds.
		Mr. E. Billon, Deyrah Ismael Khan, Punjab, ...	0	0	2	Ditto, and flower do.
		R. H. Caviland, Esquire, Lahore, ...	0	0	4	Vegetable, flowerc, reeper, and shrub seeds.
		Reverend J. S. Woodsid, Camp Seharunpore, ...	0	50	4	Flower plants, vegetable, flower, creeper, and Timber seeds.
		M. Brodhurst, Esquire, C. S., Seharunpore, ...	0	2	0	Flower plants.
		Goolab Sing, Jugadhree, ...	36	7	0	Fruit and shrub plants.
		Mrs. Shelton, Simlah, ...	0	0	2	Vegetable and flower seeds.
		The Officer Commanding Her Majesty's 98th Regiment of Foot, for Soldiers' Gardens, Peshawur, ...	0	0	4	Country vegetable seeds.
		Ditto, ditto, ditto,	0	0	2	Ditto flower do.
		Ditto, ditto, ditto,	0	0	2	Ditto creeper do.
		Ditto, ditto, ditto,	0	0	1	Indian corn.
		Mrs. Billings, Delhie, ...	0	0	3	Vegetable, flower, and creeper seeds.
		Doctor J. Hutchinson, Dehra Dhoon, ...	0	0	2	Vegetable seeds.
		Ditto, ditto, ...	0	0	2	Flower seeds.
		Ditto, ditto, ...	0	0	2	Creeper seeds.
	27th	Captain T. Slater, 82nd Regiment, Shahjehanpore, ...	0	0	1	Lucerne seed.
		T. D. Forsyth, Esquire, Commissioner, Lahore, ...	0	0	2	4 seers Stillingea seeds.
		Captain Young, Deputy Commissioner, Hoshearpore, ...	0	0	2	Ditto ditto.
		G. Campbell, Esquire, Judicial Commissioner, Oude, ...	0	0	2	Ditto ditto.
		Sogunchund Mahajun, Seharunpore, ...	105	23	0	Fruit, shrub, and flower plants.
		Syud Ruza Hosain, Seharunpore, ...	18	4	0	Fruit and flower plants.
		W. Wynyard, Esquire, Judge, Seharunpore, ...	56	90	0	Ditto, and shrub plants.
		Total, ...	3,218	2,349	170	
		March 1861.				
March	1st	M. Brodhurst, Esquire, Civil Service, Seharunporer, ...	0	1	0	Magnotia fuscata.

	W. Wynyard, Esquire, Judge of Seharunpore, ...	0	1	0	Ditto.
4th	Baboo Bishumbhur Ghose, Seharunpore, ...	400	0	0	Strawberry plants.
9th	Captain Close, Huzarah, Goorkha Battalion, Abbottabad,	0	0	2	Vegetable and flower seed.
	Doctor R. B. Buckle, ditto, ditto, ...	0	0	2	Ditto ditto.
	The Officer Commanding 4th Company 2nd Battalion Bengal Artillery, Rawul Pindee, ...	0	0	2	Country vegetable do.
	Ditto, ditto, ditto,	0	0	2	Flower and creeper seeds.
	Ditto, ditto, ditto,	0	0	1	Indian corn.
	The Officer Commanding Her Majesty's 81st Regiment of Foot, for Soldiers' Gardens, Rawul Pindee, ...	0	0	7	Country vegetable seeds.
	Ditto, ditto, ditto,	0	0	4	Do. flower seeds.
	Ditto, ditto, ditto,	0	0	3	Do. creeper do.
	Ditto, ditto, ditto,	0	0	1	Indian corn.
	The Officer Commanding 4th Troop 2nd Brigade Bengal Horse Artillery, for Soldiers' Gardens, Rawul Pindee,...	0	0	2	Country vegetable seeds.
	Ditto, ditto, ditto,	0	0	1	D. creeper do.
	Ditto, ditto, ditto,	0	0	1	D. flower do.
	Ditto, ditto, ditto,	0	0	1	Indian corn.
	The Officer Commanding Her Majesty's 72nd Highlanders, Mhow, ...	0	0	4	Country vegetable seeds.
	Ditto, ditto, ditto,	0	0	2	Do. flower do.
	Ditto, ditto, ditto,	0	0	2	Do. creeper do.
	Ditto, ditto, ditto,	0	0	1	Indian corn.
	The Officer Commanding Artillery Division, Umballa, ...	0	0	2	Country vegetable seeds.
	Ditto, ditto, ditto,	0	0	2	Flower and creeper do.
	Ditto, ditto, ditto,	0	0	1	Indian corn.
	Government Tea Plantation, Kaolagir, Deyrah Dhoon, ...	0	0	1	Vegetable seeds.
	F. R. Hogg, Esquire, Seharunpore, ...	0	1850	0	Cuttings of kind.
11th	Mr. J. Powell, ditto, ...	118	41	0	Fruit and shrub plants.
	Colonel P. Abbott, Deyrah Dhoon, ...	60	18	0	Do. do. and timber do.
	The Officer Commanding 7th Battery, 11th Brigade Royal Artillery, Peshawur, ...	0	0	2	Country vegetable seeds.
	Ditto, ditto, ditto,	0	0	2	Flower and creeper do.
	Ditto, ditto, ditto,	0	0	1	Indian corn.
	The Officer Commanding Her Majesty's 93rd Highlanders, Rawul Pindee, ...	0	0	6	Country vegetable seeds.
	Carried over, ...	578	1,911	55	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Seharunpoor, during the year 1861.—(Continued.)

Month and Date.		Name of Parties applying and supplied.	Fruit Trees.	Timber, Shrub and Flower Plants.	Parcel of Seed.	Remarks.
		Brought forward, ...	578	1,911	55	
March	11th	The Officer Commanding Her Majesty's 93rd Highlanders, Rawul Pindee, ..	0	0	3	Country flower seeds.
		Ditto, ditto, ditto,	0	0	3	Do. creeper do.
		Ditto, ditto, ditto,	0	0	1	Indian corn.
	12th	The Officer Commanding Her Majesty's 4th Regiment Bengal European Infantry, Lucknow, ...	0	0	2	Country vegetable seeds.
		Ditto, ditto, ditto,	0	0	2	Flower and creeper do.
		Ditto, ditto, ditto,	0	0	1	Indian corn.
		P. W. Powlett, Esquire, Assistant Commissioner, Kohat, Punjab, ...	0	0	3	Timber, shrub, and flower seeds.
		Mr. Richards, Seharunpore, ...	0	0	2	Vegetable and flower do.
	13th	Colonel P. Abbott, Dehra Dhoon, ...	43	0	0	Fruit trees.
		Goorsurun Dass, Surishtadar Collector's Court, Seharunpore,	61	18	0	Fruit, timber, and shrub plants.
		Mr. W. H. Johnson, Camp Seharunpore, ..	0	0	3	Vegetable, flower, and tea seeds.
		The Jail-keeper, Seharunpore, ...	0	35	3	Huldee roots.
		Ditto, ditto, ...	0	36	0	Arrowroot do.
		Ditto, ditto, ...	0	50	0	Artichoke do.
	14th	Henry Cope, Esquire, Umritsur, ...	0	0	1	Shrub seeds.
		Captain Cumberland, Almorah, ...	0	0	3	Vegetable, Lucerne, and Clover seeds.
		T. E B. Brown, Esquire, Secretary, P. A. H. Society, Lahore, ...	0	0	1	Country vegetable seeds.
		Captain W. K. Fooks, Her Majesty's Bengal Artillery, Umritsur, ...	0	0	3	Vegetable, flower, and creeper seeds.
		Mr. F. D. Daly, Simlah, ...	0	0	1	English flower seeds.
		Captain H. R. Morgan Denkin, Cottah, ...	0	0	1	Creeper seeds.
		Mr. J. H. Billings, Boolundshahur, ...	0	0	3	Vegetable, flower, and creeper seeds.
		Baboo Radha Nath, Dehra Dhoon, ...	46	0	0	Fruit plants.
		Mr. J. Beverley, Camp Seharunpore, ...	0	0	2	Vegetable and flower seeds.

15th	Major J. Skinner, Delhie, ...	0	0	3	Vegetable, flower, and creeper seeds.
	Mr. W. Wilcocks, Deputy Superintendent E. J. Canal, Barouth, ...	32	20	0	Fruit and shrub plants.
	Bishumbher Ghose, Seharunpore, ...	6	0	0	Fruit trees.
16th	Ameer Alli, Ditto, ...	130	0	0	Ditto.
	Bishumbhur Ghose, Seharunpore, ...	0	100	0	Bangun plants.
	Ditto, Ditto, ...	0	102	0	Artichoke bulbs.
	Ramchunder Rao, Gwalior, ...	0	0	3	Vegetable, flower, and creeper seeds.
	Conductor A. B. Fox, Murree, ...	0	0	1	English vegetable seeds.
	A. H. Eckford, Esq., Fyzabad, ...	0	0	3	Vegetable, flower, and creeper seeds.
	Mr. G. E. Powell, Seharunpore, ...	0	42	0	Flower plants.
18th	R. Egerton, Esq., Lahore, ...	141	0	0	Fruit trees.
	Nubee Bux, Darogah of Garden, Lahore, ...	15	0	0	Grafted Mango plants.
19th	Baboo Bishumbhur Ghose, Seharunpore, ...	0	40	0	Huldee tubers.
20th	Mr. Powell, ditto, ...	0	6	0	Flowering shrubs.
	Mr. C. B. Hall, ditto, ...	0	6	0	Ditto ditto.
23rd	F. R. Hogg, Esq., ditto, ...	0	0	1	One seer Lucerne seed.
26th	The Joint Magistrate of Seharunpore, for planting on the banks of Damola river, ...	0	10	0	Timber trees.
	Mrs. E. Howard, Mynpoorie, ...	0	0	2	Flower and creeper seeds.
	Captain Reid, Deputy Commissioner, Goordasspore, ...	0	0	3	Vegetable, flower, and creeper seeds.
	Dr. C. Prentis, Jullunder, ...	0	0	1	Vegetable seeds.
27th	The Joint Magistrate, Seharunpore, ...	0	10	0	Timber trees.
28th	Ditto, ditto, ...	0	10	0	Ditto do.
	Baioo Mull, Munglore, zillah Seharunpore, ...	106	22	0	Fruit and shrub plants.
	Dr. J. H. Hutchinson, Dehra Dhoon, ...	0	0	1	Pine and Timber seed.
	The Joint Magistrate, Seharunpore, ...	0	20	0	Timber trees.
30th	The Joint Magistrate, Seharunpore, ...	0	20	0	Timber trees.
	Choudrie Bahadar Singh, for Raja of Putiala, ...	110	18	2	Fruits and shrub plants, and flower and creeper seeds.
	Total, ...	1,268	2,476	110	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Seharunpore, during the year 1861.—(Continued)

Month and Date.		Name of Parties applying and supplied.	Fruit Trees.	Timber, Shrub and Flower Plants.	Parcel of Seed.	Remarks.
		April 1861.				
April	1st	The Joint Magistrate, Seharunpore, ...	0	20	0	Timber trees.
		Reverend Mr. Carleton, Umballa, ...	0	0	2	Flower and creeper seeds.
	2nd	The Joint Magistrate, Seharunpore, ...	0	20	0	Timber trees.
		M. Brodhurst, Esq., Seharunpore, ...	0	8	0	Shrub plants.
	3rd	N. W. Elphinstone, Esq., Jullunder, ...	0	229	0	Timber and shrub plants.
		Ditto, ditto, ...	0	500	0	Shrub cuttings.
	4th	Major O. E. Rothney, Commanding Hazara Goorkha Battalion, Abbottabad, ...	0	0	2	Vegetable seeds.
		Ditto, ditto,	0	0	2	Flower and creeper do.
		Mr. A. P. Webb, Meerut, ...	0	0	2	Vegetable seeds.
		Ditto, ditto, ...	0	0	2	Flower do.
		Ditto, ditto, ...	0	0	1	Creeper do.
		E. Meakin, Esq., Hotta viâ Kangra, ...	0	9	1	Green Indigo seeds.
		J. Walker, Esq., Simla, ...	0	6	1	Dahlia roots and flower seeds.
		Mr. G. C. Peake, Kussowlee, ...	0	0	2	Vegetable and flower ditto.
	5th	The Joint Magistrate of Seharunpore, ...	0	20	0	Timber trees.
		Bunseedhur, Seharunpore, ...	36	0	0	Fruit trees.
	6th	The Joint Magistrate of Seharunpore, ...	0		0	Timber trees.
		Kuniah Lall, ditto,	8	20	0	Fruit and timber trees.
		Captain F. H. Crawford, Commanding at Landour, for Soldiers' Gardens, ...	0	2	1	Vegetable seeds.
		The Officer Commanding Artillery Division, Jullunder, ...	0	2	2	Country vegetable seeds.
		W. Wynyard, Esq., C. S., Seharunpore, ...	0	0	1	Rose plants and country vegetable seeds.

8th	The Joint Magistrate of Seharunpore, ...	0	10	0	Timber trees.
9th	Doctor G. E. Pool, Simlah, ...	0	33	2	Bulbs of kind, also vegetable and flour seeds.
	R. Saunders, Esq., Dhurmsalla, ...	0	0	2	Vegetable and Timber seeds.
	R. C. Lindsay, Esq., Futtygurh, ...	0	0	1	Thumbergia seeds.
	The Overseer Government Tea Plantation, Hotta, Kangrah,	0	0	4	Vegetable and flower seeds.
	Choudrie Bahadur Singh, for Raja of Putiala. ...	60	70	0	Fruit and shrub plants.
10th	Doctor Corbyn, Superintendent Central Jail, Meerut, ...	0	0	1	English vegetable seeds.
	Mr. B. H. Weles, Ferozepore, ...	0	0	3	Flower, vegetable and creeper seeds.
	Major Penton, Meerut, ...	0	0	3	Ditto ditto ditto.
	Colonel R. E. Knatchbull, Morar, Gwalior, ...	0	0	1	Pumpkin seeds.
13th	W. Edwards, Esq., Judge, Benares, ...	0	0	3	Vegetable, flower, and creeper seeds.
	Government Horticultural Garden, Deyrah Dhoon, ...	0	306	0	Flower plants.
17th	W. H. Carey, Esq., Allahabad, ...	0	0	4	Timber, fruit, shrub, and creeper seeds.
	Lutchmun Doss, Seharunpore, ...	0	59	0	Flowering shrubs.
18th	John Beames, Esq., Assistant Commissioner, Umballa, ...	0	0	3	Vegetable, flower, and creeper seeds.
	P. Jenkins, Esq., Superintendent Police, Landour, ...	0	0	2	Vegetable and flower seeds.
	Gunashee Lall, of Birla, zillah Moozuffurnuggur, ...	54	53	0	Fruit and shrub plants.
19th	H. Cope, Esq., Umritsur, ...	0	0	8	Shrub seeds.
21st	F. E. Moon, Esq., Extra Assistant Commissioner, Jullunder,	0	0	4	Vegetable, flower, creeper, and shrub seeds.
	B. E. Anderson, Esq., 3rd European Regiment, Landour,...	0	0	2	English vegetable and flower seeds.
	Dr. R. Parker, Civil Surgeon, Dhurmsalla, ...	0	0	1	English vegetable seeds.
	Lieut. T. R. Ryan, Bengal Horse Artillery, Meean Meer, ...	0	0	1	Grass seed.
22nd	Captain W. Mylne, Umballa, ...	2	0	3	Fruit trees, vegetable, flower, and creeper seeds.
24th	Dr. J. S. Wood, Seharunpore, ...	0	0	1	Lucerne seed.
26th	Major H. Maxwell, Chief Engineer, Nagpore, ...	0	0	4	Timber seeds.
	G. M. Jones, Esq., Sirsah, ...	0	0	4	Vegetable, flower, and creeper seeds.
	Carried over, ...	160	1,360	76	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Scharunpore, during the year 1861.—(Continued.)

Month and Date.		Name of Parties applying and supplied.	Fruit Trees.	Timber, Shrub and Flower Plants.	Parcel of Seed.	Remarks.
		Brought forward, ...	160	1,360	76	
April	27th	E. H. Kennard, Esq., 7th Hussars, Umballa, ...	0	79	0	Flower cuttings.
		Government Botanical Garden, Mussoorie, ...	0	0	1	Flower seeds.
	29th	Mrs. Alexander, Mussoorie, ...	0	0	1	Ditto ditto.
		R. C. Lindsay, Esq., Civil Service, Futtehgurh, ...	0	3	0	Ipomœa bulbs.
		Mr. R. Powell, Seharunpore, ...	0	4	0	Flower plants.
		Total, ...	160	16	78	
May	6th	Capt. A. T. Armstrong, Private Secretary to the Hon'ble the Lieutenant Governor, N. W. Provinces, Nynee Tal,	0	0	2	English vegetable seeds.
		Bahadoor Singh Choudrie, for Raja of Putiala, ...	102	25	0	Fruits, shrub, and flower plants.
	8th	C. R. Crommeline, Esq., Asst. Commissioner, Roy Bareilly,	0	0	7	Vegetable, flower, shrub, timber, and grass seeds.
		The Settlement Officer Nagpore Province, Seetabuldee, ...	0	102	2	Bulbs of kind, and vegetable and flower seeds.
		Lieutenant W. Jeffreys, Engineers, Kurnaul, ...	0	0	1	Myrtle seeds.
		Lieutenant Colonel R. E. Knatchbull, Commanding Artillery Division, Morar, Gwalior, ...	0	0	1	Water-cress seeds
		W. Duthoit, Esq., Camp Mohun Pass, ...	0	0	1	Vegetable seeds.
	9th	Mr. C. T. Olliver, Mirzapore, ...	0	0	2	Ditto, and flower seeds.
		Peter Mitchell, Esq., Simlah, ...	0	0	3	Fruit, vegetable, and flower seeds.
	14th	Lieutenant Colonel E. Mooney, Dora Giree Plantation, Almorah, ...	0	0	2	English vegetable and flower seeds.
	17th	C. G. Hind. Esq., East India Railway, Khoorja, Boolundshahur, ...	0	0	1	English vegetable seed.

	17th	Mr. Powell, Scharunpore, ...	0	4	0	Flower plants.
	22nd	Mr. W. Smith, Meerut, ...	0	0	1	Grass seed.
		Captain Heycort, 89th Regiment, Umballa, ...	0	0	2	Vegetable and flower seeds.
		C. P. Carmichael, Esq., C. S., Mussoorie, ...	0	0	2	Ditto ditto.
	23rd	The Overseer Government Tea Plantation, Kaolagir, Deyrah Dhoon ...	0	0	3	Vegetable, flower, and creeper seeds.
	28th	The Officer Commanding Her Majesty's 81st Regiment of Foot, for Soldiers' Garden, Rawul Pindee, ...	0	0	10	English vegetable seeds.
		Ditto, ditto, ditto,	0	0	5	Ditto flower do.
	29th	The Officer Commanding Her Majesty's 93rd Highlanders, Rawul Pindee, ...	0	0	10	Ditto vegetable seeds.
		Ditto, ditto, ditto,	0	0	5	Ditto flower do.
		P. Percival, Esq., Shahjehanpore, ...	0	0	2	Vegetable and flower do.
		H. R. Bishop, Esq., Umballa, ...	0	0	3	Ditto ditto and creeper seeds.
		Mrs. Powell, Seharunpore, ...	0	6	0	Tea rose plants.
	30th	The Officer Commanding Her Majesty's 82nd Regiment of Foot, for Soldiers' Gardens, Shahjehanpore, ...	0	0	10	English vegetable seeds.
		Ditto, ditto, ditto,	0	0	5	Ditto flower do.
		Total, ...	102	137	80	
		June 1861.				
June	1st	The Officer Commanding Convalescent Depôt, Nynee Tal,	0	0	6	English vegetable seeds.
		Ditto, ditto, ditto,	0	0	3	Ditto flower do.
		Captain R. Maclagan, Chief Engineer, Punjab, Murree, ...	0	0	1	Ditto vegetable seed.
		Ditto, ditto, ditto,	0	0	2	Flower and creeper do.
		Mrs. Clifford, Onao, near Cawnpore, ...	0	0	2	Vegetable and flower seeds.
	3rd	Captain W. C. MacDougall, Stud Depôt, Seharunpore, ...	0	0	3	Vegetable, flower, and creeper seeds.
		The Officer Commanding Her Majesty's 3rd Dragoon Guards, Mhow, ...	0	0	4	English vegetable seeds.
		Ditto, ditto, ditto,	0	0	2	Flower seeds.
		Carried over. ...	0	0	23	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Seharunpore, during the year 1861.—(Continued.)

Month and Date.		Name of Parties applying and supplied.	Fruit Trees.	Timber, Shrub and Flower Plants.	Parcel of Seed.	Remarks.
		Brought forward, ...	0	0	23	
June	3rd	The Officer Commanding Her Majesty's 4th Regiment Bengal European Infantry, Lucknow, ...	0	0	4	English vegetable seeds.
		Ditto, ditto, ditto,	0	0	2	Ditto flower do
		G. E. Mercer, Esq., Etah, ...	0	0	1	Timber seeds.
		C. Cooke, Esq., Do., ...	0	0	1	Ditto do.
	4th	Sergeant Carenarton, Canal Department, Barouth, ...	0	0	2	Flower and creeper seeds.
	5th	The Officer Commanding Her Majesty's 72nd Highlanders, Mhow, ...	0	0	5	English vegetable seeds.
		Ditto, ditto, ditto,	0	0	2	Ditto flower do.
		The Officer Commanding 7th Battery 11th Brigade Royal Artillery, Peshawur, ...	0	0	4	Ditto vegetable do.
		Ditto, ditto, ditto,	0	0	2	Ditto flower do.
		The Officer Commanding 4th Company 2nd Battalion Bengal Artillery, Rawul Pindee, ...	0	0	2	Ditto vegetable do.
		Ditto, ditto, ditto,	0	0	1	Ditto flower do.
		The Officer Commanding 4th Troop 2nd Brigade Bengal Horse Artillery, Rawul Pindee, ...	0	0	2	Ditto vegetable do.
		Ditto, ditto, ditto,	0	0	1	Ditto flower do.
		B. Sapte, Esq., C. S., Meerut, ...	0	0	2	English vegetable seeds
	6th	The Officer Commanding Artillery Division, Jullunder,...	0	0	3	Ditto vegetable do.
		Ditto, ditto, ditto,	0	0	1	Ditto flower do.
		The Officer Commanding Convalescent Depôt, Murree, ...	0	0	3	Ditto vegetable do.
		Ditto, ditto, ditto,	0	0	1	Ditto flower do.
	7th	The Officer Commanding Her Majesty's 91th Regiment, Nowshera, ...	0	0	10	Ditto vegetable do.
		Ditto, ditto, ditto,	0	0	5	Ditto flower do.

	The Officer Commanding Right Wing Her Majesty's 82nd Regiment, for Soldiers' Gardens, Moradabad, ...	0	0	10	Ditto vegetable do.
	Ditto, ditto, ditto,	0	0	5	Ditto flower do.
8th	The Officer Commanding Her Majesty's 1st Battalion 7th Royal Irish, Peshawur, ...	0	0	12	Ditto vegetable do.
	Ditto, ditto, ditto,	0	0	5	Ditto flower do.
	Kureembux, Munglore, zillah Seharunpore, ...	145	35	0	Fruit and shrub plants.
	Raja Teeka Neehal Singh, Seharunpore, ...	40	37	0	Fruit, shrub, and flower plants.
10th	The Officer Commanding 1st Battalion Her Majesty's 19 th Regiment, for Soldiers' Gardens, Benares, ...	0	0	6	English vegetable seeds.
	Ditto, ditto, ditto,	0	0	3	Ditto flower do.
	The Officer Commanding Her Majesty's 42nd Royal Highlanders, Bareilly, ...	0	0	12	Ditto vegetable seeds.
	Ditto, ditto, ditto,	0	0	5	Ditto flower do.
	Captain W. C. MacDougall, Seharunpore, ...	0	0	1	Creeper seeds.
	Neadur Singh, Rajoopore, zillah Mozuffurnuggur, ...	8	141	0	Fruit, shrub, and flower plants.
15th	The Officer Commanding Her Majesty's 98th Regiment, Peshawur, ...	0	0	12	English vegetable seeds.
	Ditto, ditto, ditto,	0	0	5	Ditto flower do.
	The Officer Commanding 92nd Highlanders, Dugshae, ...	0	0	10	Ditto vegetable do.
	Ditto, ditto, ditto,	0	0	5	Ditto flower do.
17th	The Officer Commanding Right Wing Her Majesty's 88th Regiment, Shahjehanpore, ...	0	0	5	Ditto vegetable do.
	Ditto, ditto, ditto,	0	0	2	Ditto flower do.
	The Officer Commanding Her Majesty's Regiment Bengal Artillery, 2nd Troop 2nd Brigade H. A., Allahabad, ...	0	0	2	Ditto vegetable do.
	Ditto, ditto, ditto,	0	0	1	Ditto flower do.
	The Officer Commanding Artillery Division, Umballa, ...	0	0	4	Ditto vegetable do.
	Ditto, ditto, ditto,	0	0	2	Ditto flower do.
18th	Major M. J. Slater, Almorah, ...	0	0	2	Ditto do. and vegetable do.
	R. Spankie, Esq., Futtehgurh, ...	0	0	2	Flower and creeper do.
	Captain A. Pearson, Engineer, Umballa, ...	0	0	3	Vegetable, flower, and creeper do.
	Colonel E. H. Maxwell, Her Majesty's 88th Regiment, Mussoorie, ...	0	0	2	Flower and creepes do.
	Carried over, ...	193	213	193	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Scharunpore, during the year 1861.—(Continued.)

Month and Date.		Name of Parties applying and supplied.	Fruit Trees.	Timber, Shrub, and Flower Plants.	Parcel of Seed.	Remarks.
		Brought forward, ...	193	213	193	
June	18th	F. Ferris, Esq., Commanding at Rampore, ...	0	0	2	Vegetable and flower seeds.
		Captain E. Dandridge, Commanding at Humeerpore, Bundelkund, ...	0	0	2	English vegetable seeds.
		The Store-keeper, Seonee Bridge Works, Koilwar, ...	0	4	2	Dahlia roots, and vegetable and flower seeds.
		Lieutenant-Colonel W. E. Morton, Engineer, Roorkee, ...	0	0	2	Lucerne and Guinea grass seeds.
		The Deputy Commissioner Seetapore, Oude, ...	0	0	5	Timber seeds.
	19th	N. W. Elphinstone, Esq., Deputy Commissioner, Jullunder	51	133	1	Fruit and shrub plants, also timber seeds.
	21st	Major C. H. Barchard, Stud Depôt, Kurnaul, ...	0	0	2	Vegetable and flower seeds.
		Major Cuppage, Her Majesty's 89th Regiment, Umballa,...	0	0	2	Ditto ditto.
		Reverend J. Y. Mitchinson, Roy Bareilly, ...	0	0	2	Ditto ditto.
		Mrs. Ford, Simlah, ...	0	0	2	Ditto ditto.
		The Collector of Goruckpore, ...	0	0	3	English vegetable seeds.
		The Deputy Commissioner Saugor, ...	0	0	3	Ditto ditto.
		B. W. Colvin, Esq., Senior Assistant Commissioner, Kumaon, ...	0	0	2	Ditto ditto.
		The Deputy Commissioner, Jubbulpore, ...	0	0	2	Ditto ditto.
		Lieut. W. D. Chapman, Chindwara, Nagpore Province, ...	0	0	2	Ditto ditto.
	22nd	Captain Orman, Roorkee, ...	112	110	0	Fruit, shrub, and timber plants.
		Baboo Gobind Chunder Bose, Anoopshahur,	0	0	2	Fruit and flower seed.
		Dr. E. B. Brown, Secretary, A. H. Society, Lahore, ...	0	0	1	Timber seeds.
		Revd. J. S. Woodside, Kaporthala, ...	0	0	5	Vegetable, flower, creeper, Timber, and shrub seeds.
		Mr. E. Fitzsimons, Simla, ...	0	0	2	Vegetable and flower seeds.
		Dr. G. W. Bonavia, Secy. A. H. Society, Lucknow, ...	0	0	4	Hill pine, timber, and tea seeds.
		H. W. Willock Esq., Joint Magistrate, Shahjehanpore, ...	0	0	2	Vegetable seeds.
	24th	G. Jones Esq., Sirsa, ...	0	0	2	Vegetable seeds.

	Lieut. M. Stewart, Grazing Fund Committee, Meean Meer,	0	0	2	English and country flower seeds.
	Ditto, ditto, ditto, ...	0	0	1	Vegetable seeds.
	Ens. G. R. Peart, P. M. C., Left Wing 19th N. I., Augur, *via* Malwa, ...	0	0	1	Ditto ditto.
	Revd. W. Shaw, Chaplain, Moradabad, ...	0	0	2	Vegetable and flower ditto.
	Brigadier Hetchman, Commanding Gwalior District, Gwalior, ...	0	0	2	Ditto ditto.
	Lieutenant Colonel J. C. Campbell, Engineers, Meerut, ...	0	0	2	Flower and creeper do.
	Captain W. C. MacDougall, Stud Depôt, Seharunpore,...	0	0	1	Creeper seeds.
26th	The Officer Commanding Depôt at Kussowlee, ...	0	0	2	Vegetable seeds.
	H. R. Wilson, Esq., Bareilly, ...	0	0	2	Ditto and flower ditto.
	Lieutenant E. Swetenham, Mussoorie, ...	0	0	1	English flower ditto.
	Baboo Chunder Nath Bose, Sub-Assistant Surgeon, Googaira, ...	0	0	1	Drumhead Cabbage seeds.
	J. Brooke, Esq., Jeypore, ...	0	0	3	Flower, creeper, and tea seeds.
27th	Major D. M'Neil, Bengal Artillery, Agra, ...	0	0	1	Vegetable seeds.
	Captain Howard, Umballa, ...	0	0	2	English vegetable do.
	Ditto, ditto, ...	0	0	2	Flower do.
	Lieutenant S. H. Hobbs, Her Majesty's 89th Regiment, Umballa, ...	0	0	2	Vegetable and flower do.
	Captain Selby, Her Majesty's 89th Regiment, Umballa,...	0	0	1	English flower do.
28th	Baboo Kylas Chunder, Deputy Post Master, Seharunpore, ...	0	3	0	Peepul trees.
	Husson Mohumud, Paishkar, Tehseel Seharunpore, ...	223	0	0	Fruit trees.
	Dr. C. T. Paske, Civil Surgeon, Seharunpore, ...	5	66	0	Fruit and shrub plants.
	Mohumud Ibraheem, Paishkar, Tehseel Nukoor, zillah Seharunpore, ...	97	21	0	Fruit, shrub, and timber plants.
	Captain W. C. MacDougall, Stud Depôt, Seharnnpore, ...	0	2	0	Chumpa plants.
	Kishore Chund, Seharunpore, ...	60	6	0	Fruit and shrub plants.
	Gopal Singh, ditto, ...	2	67	0	Ditto, ditto, and flower plants.
	Total, ...	743	625	273	

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STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Seharunpore, during the year 1861.—(Continued).

Month and Date.		Names of Parties applying and supplied.	Fruit Trees.	Timber, Shrub and Flower plants.	Parcel of Seed.	Remarks.
		July 1861.				
July	3rd	H. G. Keene, Esq., Officiating Collector, Mozuffernuggur,	0	0	2	Vegetable and flower seeds.
		Sergeant P. Switzer, Ferozepore, ...	0	0	2	Ditto ditto.
		Lieutenant J. Blair, 1st Regiment Central India Horse, Augur, ...	0	0	2	Ditto ditto.
		Captain J. A. Martin, Executive Engineer, Public Works Department, Goruckpore, ...	0	0	2	Ditto ditto.
		Reverend J. R. Campbell, Seharunpore, ...	0	3	0	Toon plants.
	4th	Soonder Lall, ditto, ...	90	14	0	Fruit and shrub plants.
		Doctor Paske, ditto, ...	0	29	0	Shurb plants.
	5th	The Officer Commanding 3rd Battalion Rifle Brigade, Bareilly, ...	0	0	10	English vegetable seeds.
		Ditto, ditto, ditto,	0	0	5	Ditto flower ditto.
		Lieutenant R. Doid, 27th Inniskillings, for Soldiers' Gardens, Gwalior, ...	0	0	10	Ditto vegetable seeds.
		ditto, ditto, ditto,	0	0	2	Do. flower do.
		Major D. M'Neil, Commanding Artillery Division, Agra,	0	0	2	Ditto vegetable do.
		Ditto, ditto, ditto,	0	0	1	Ditto flower do.
		The Officer Commanding 6th Battery 14th Brigade Royal Artillery, Roy Bareilly, ...	0	0	2	Ditto vegetable do.
		Ditto, ditto, ditto,	0	0	1	Ditto Lucerne do.
	6th	The Officer Commanding Right Wing Her Majesty's 48th Regiment of Foot, Roy Bareilly, ...	0	0	4	English vegetable seeds.
		Ditto, ditto, ditto,	0	0	1	Ditto flower do.
		The Deputy Commissioner, Ajmere, ...	0	0	3	Ditto vegetable do.
		Captain M. M. Proctor, Cantonment Joint Magistrate, Fyzabad, ...	0	0	2	Flower seeds.

	Ditto, ditto, ditto,	0	0	1	English vegetable seed.
	G. A. Bradford, Esq., Assistant Patrol, Tarsee, Muttra, ...	0	0	1	Ditto flower seeds.
	Captain W. H. Boylcon, Political Agent, Deole, viâ Nusseerabad, ...	0	0	3	Timber, shrub, and creeper seeds.
	Reverend J. Mitchinson, Chaplain, Roy Bareilly, ...	0	0	1	Lucerne grass seed.
	Major Trevelyon, 7th Hussars, ...	0	0	1	English vegetable seeds.
	Lieutenant T. R. Ryan, Bengal Horse Artillery, Mean Meer, ...	0	0	2	Grass seeds.
	Captain H. A. Miller, in charge of Government Garden, Rawul Pindee, ...	0	0	1	Cabbage seeds.
	Mr. W. E. Hind, Deyrah Ismael Khan, ...	0	0	2	English vegetable and flower seeds.
	J. H. Master, Esq., Deputy Commissioner, Chindwara,	0	0	2	Ditto ditto ditto.
	Captain D. V. Valpy, 89th Regiment, Umballa, ...	0	0	2	Ditto ditto ditto.
	J. Norman, Esq., Bareilly, ...	0	0	2	Ditto ditto ditto.
	Lieutenant Colonel A. D. Turnbull, Superintendent General of Irrigation, North Western Provinces, Roorkee,	0	0	2	Cotton seeds of kind.
	Dr. Prentis, late 7th Punjaub Infantry, Meerut, ...	0	0	1	English vegetable seeds.
	A Ross, Esq., Agra, ...	0	0	2	Ditto ditto and flower ditto.
8th	Dr. Paske, Seharunpore, ...	0	72	0	Flowering shrubs.
	Nundkishore, Deputy Collector, Seharunpore, ...	83	73	0	Fruit and shrub plants.
9th	Captain Rawlins, Superintendent of Police, Seharunpore,	0	9	0	Shrub plants.
	Atmaram, Seharunpore, ...	98	30	0	Fruit and shrub plants.
12th	Dr. Kendall, 7th Hussars, Camp Seharunpore, ...	0	0	3	Vegetable, flower, and creeper seeds.
	Major Trench, Haupur, ...	0	0	2	Vegetable and flower seeds.
	Mr. E. Roberts, Mussoorie, ...	0	0	1	English vegetable seeds.
	Captain Hawkins, 4th Bengal Cavalry, Umballa, ...	0	0	2	Ditto ditto.
	Ditto, ditto, ditto, ...	0	0	2	Ditto ditto.
	The Collector of Agra, ...	0	0	1	Carrot and Cauliflower ditto.
	J. Higgins, Esq., Chindwara, ...	0	0	2	Vegetable and flower seeds.
	Lieutenant A. H. Eckford, Assistant Commissioner, Fyzabad, ...	0	0	2	English vegetable and flower seeds.
	Ubdul Rusool, Seharunpore, ...	89	31	0	Fruit and shrub plants.
13th	The Officiating Collector, Muttra, ...	0	0	2	English vegetable seeds.
	Carried over, ...	360	261	91	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Seharunpore, during the year 1861.—Continued.

Month and Date.		Name of parties applying and supplied.	Fruit Trees.	Timber, Shrub and Flower plants.	Parcel of seed.	Remarks.
		Brought forward, ...	360	261	91	
July	13th	The Joint Magistrate, Seharunpore, ...	0	0	2	English vegetable seeds.
		Dr. J. Hutchinson, Civil Surgeon, Deyrah Dhoon, ...	0	0	2	Timber and creeper seeds.
		Mr. J. R. Harris, Seonee, ...	0	0	2	Flower and ditto.
		Mr. E. Churcher, Deputy Collector, Etah, ...	0	0	2	Vegetable and flower do.
		Mr. Cumming, Roorkee, ...	20	14	3	Fruit, shrub, and Timber plants, and vegetable, flower, and Lucerne do.
		Ulleebux, Seharunpore, ...	98	0	0	Fruit trees.
	15th	Lieutenant E. Paske, Deputy Commissioner, Goojrat, Punjaub, ...	0	0	5	Vegetable, flower, creeper, and shrub seeds, also 60 Malda Mangoe stones.
		Mr. A. H. Ten Broeke, Canal Office, Roorkee, ...	0	4	4	Flower plants, and vegetable and flower seeds.
		Ruheembux, Seharunpore, ...	73	0	0	Fruit trees.
	16th	Jafur Hoosain, ditto, ...	20	0	0	Ditto ditto.
		Ullee Husson, ditto, ...	22	0	0	Ditto ditto.
		Munga Bildar, ditto, ...	15	0	0	Ditto ditto.
	17th	The Officer Commanding 6th Battalion 14th Brigade Royal Artillery, Roy Bareilly, ...	0	0	2	Vegetable seeds.
		Ditto, ditto, ditto, ...	0	0	1	Lucerne seeds.
		Lieutenant H. Cracroft, Adjutant 3rd Bengal Cavalry, Nowgong, ...	0	0	1	English vegetable seeds.
		Mrs. Clarke, Simla, ...	0	0	1	Ditto flower ditto.
		Dr. Cunningham, Bareilly, ...	0	0	2	Ditto ditto, and vegetable seeds.
		Captain W. C. MacDougall, Stud Depôt, Seharunpore, ...	0	0	3	5 seers Keekur seeds.
	18th	H. Cope, Esq., Umritsur, ...	0	0	1	Acacia and Neem seeds.
		The Officer Commanding Her Majesty's 7th Hussars, Umballa, ...	0	0	7	English vegetable seeds.
		Ditto, ditto, ditto, ...	0	0	2	Ditto flower ditto.

Ditto, ditto, ditto, ...	0	0	1	Grass seeds.
19th Nundkishore, Scharunpore, ...	0	0	2	Vegetable and Lucerne seeds.
The Magistrate Cawnpore, ...	0	0	6	English vegetable seeds.
23rd The Collector of Benares, ...	0	0	1	Ditto ditto.
Dr. A. K. Reid, Attock, ...	0	0	2	Ditto and flower ditto.
Captain G. Howard, 6th Regiment Light Infantry, Cawnpore, ...	0	0	2	Ditto do. do.
C. E. Killkilly Esq., Allygurh, ...	0	0	2	Ditto do.
W. Johnson Esq., Moradabad, ...	0	0	2	Ditto do.
Lieutenant C. H. Chauncy, Her Majesty's 48th Regiment, Roy Bareilly, ...	0	0	2	Ditto do. do.
24th Major E. Donnell, Morar, Gwalior, ...	0	0	2	Ditto do. do.
Captain A. Macqueen, Fyzabad, Oude, ...	0	0	2	Ditto do. do.
R. H. Haviland Esq., Lahore, ...	0	0	5	Timber, shrub flower, vegetable and creeper seeds.
Sergeant G. W. King, Allahabad, ...	0	0	2	Vegetable and flower do.
G. Osborne Esq., Opium Agent, Goruckpore, ...	0	0	2	Ditto do. do.
25th G. W. Scarlett Esq., Officiating Secretary Local Fund, Peshawur, ...	0	0	6	Timber seeds.
Ditto, ditto, ditto, ...	0	0	2	Fruit do.
The Officer Commanding Her Majesty's 3rd Regiment Bengal Light Cavalry, Peshawur, ...	0	0	3	English vegetable seeds.
Ditto, ditto, ditto,	0	0	1	Ditto flower do.
The Officer Commanding Her Majesty's 1st Bengal Fusiliers, Mooltan ...	0	0	7	Ditto vegetable do.
Ditto, ditto, ditto, ...	0	0	2	Ditto flower ditto.
Reverend J. R. D. Aguilar Chaplain, Seharunpore, ...	0	0	3	Vegetable, flower, and creeper do.
Reverend G. R. Campbell, ditto, ...	260	0	1	Fruit trees, and vegetable seeds.
27th The Officer Commanding Ferozepore Artillery Division, Ferozepore, ...	0	0	2	English vegetable seeds.
Ditto, ditto, ditto, ...	0	7	1	Ditto flower do.
The Officer Commanding Her Majesty's 79th's Highlanders, Ferozepore, ...	0	0	7	Ditto vegetable do.
Ditto, ditto, ditto, ...	0	0	2	Ditto flower do.
Carried over, ...	868	279	201	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Seharunpore, during the year 1861.—(Continued.)

Month and Date.		Name of Parties applying and supplied.	Fruit Trees.	Timber,shrub, and Flower Plants.	Parcel of Seed.	Remarks.
		Brought forward, ...	868	279	201	
July	29th	The Officer Commanding Her Majesty's 7th Dragoon Guards, Sealkote, ...	0	0	7	English vegetable seeds.
		Ditto, ditto, ditto, ...	0	0	3	Ditto flower do.
		The Officer Commanding 4th Battery 11th Brigade Royal Artillery, Mooltan, ...	0	0	3	Ditto vegetable do.
		Ditto, ditto, ditto, ...	0	0	1	Ditto flower do.
	30th	The Officer Commanding Her Majesty's 5th Bengal European Cavalry, Meean Meer, ...	0	0	3	Ditto vegetable do.
		Ditto, ditto, ditto, ...	0	0	2	Ditto flower do.
		The Officer Commanding 2nd Brigade Horse Artillery Head Quarters, Meean Meer, ...	0	0	2	Ditto vegetable do.
		Ditto, ditto, ditto, ...	0	0	1	Ditto flower do.
		The Officer Commanding E. Battery Royal Horse Artillery, Meean Meer, ...	0	0	3	Ditto vegetable do.
		Peara 'all, Seharunpore, ...	0	22	0	Country flower plants.
		The Officer Commanding Her Majesty's 71st Highland Light Infantry, Sealkote, ...	0	0	9	English vegetable seeds.
		Ditto, ditto, ditto, ...	0	0	4	Ditto flower do.
		Mr. H. Eldred, Superintendent of Road, Seharunpore, ...	0	46	0	Flowering shrubs.
		Gujput Roy, Sirsawah, zillah Seharunpore, ...	69	0	0	Fruit trees.
	31st	The Officer Commanding Her Majesty's 54th Regiment, Cawnpore, ...	0	0	10	English vegetable seeds.
		Ditto ditto, ditto, ...	0	0	5	Ditto flower do.
		Ubdul Uzeez, Serishtadar Magistrate's Court, Seharunpore,	85	0	0	Fruit trees.
		Sree Narain Doss, ditto, ...	0	95	0	Flower plants.
		Jhundoo Mull, ditto, ...	152	0	0	Fruit trees.
		Total, ...	1774	442	254	

		August 1861.				
August	1st	Mrs. Powell, Seharunpore, ...	96	0	0	Fruit trees,
		Nachul Singh, Roorkee, ...	227	2,000	0	Ditto and Agavee plants.
		The President of Garden Committee, for Soldiers' Gardens, Peshawur, ...	0	0	30	English vegetable seeds.
		Ditto, ditto, ditto,	0	0	10	Ditto flower do.
		Dr. Garrad, Haupor, ...	0	0	1	Vegetable do.
	2nd	W. Scotland, Esq., Roorkee, ...	74	0	2	Fruit trees, also vegetable and flower seeds.
		A. C. Cregan, Esq., Assistant Engineer, Kalka, ...	0	0	1	English flower do.
		F. Wigram, Esq, Bijnour, ...	0	0	2	Flower and vegetable do.
		A. W. Dallas, Esq., Central Jail, Lahore, ...	0	0	6	English vegetable do.
	3rd	Goorsurrun Doss, Seharunpore, ...	121	43	0	Fruit and shrub plants.
	5th	B. W. Switzer, Esq., C. S. Moradabad, ...	0	0	2	Vegetable and flower seeds.
		The Officiating Collector and Superintendent of Government Gardens, Etawah, ...	0	0	4	Ditto do.
		Major H. Dinning, late 71st Native Infantry, Umballa, ...	0	0	2	Ditto do.
		Lieutenant Phillips, Assistant Commissioner Bewar, Rajpootana, ...	0	0	2	do. Strawberry and berry seeds.
		Mr. J. M. Fox, Stud Depôt, Seharunpore, ...	0	0	1	Creeper do.
		Rev. H. Jells, Roorkee, ...	0	0	2	Vegetable and flower do.
		„ Wilkinson, ditto, ..	0	0	2	Ditto do.
	6th	Captain W. C. MacDougall, Stud Depôt, Seharunpore, ...	0	30	0	Pepul plants.
		„ W. Carnell, Commanding Mhair Regiment, Ajmere, Rajpootana, ...	0	0	4	Vegetable and flower seeds.
		J T. Shepherd, Esq., Meerut, ...	0	0	1	Vegetable seeds.
		Mr. W. Hyde, Inspector Military Police, Muttra, ...	0	0	2	Ditto and flower do.
		E. Hutton, Esq., Jubbulpore, ...	0	0	2	Ditto do.
		Radhai Lall, Seharunpore, ...	75	4	0	Fruit and cypress plants.
		The Officer Commanding Gwalior Artillery Division, Morar, Gwalior, ...	0	0	3	English vegetable seeds.
		Ditto, ditto, ditto, ...	0	0	2	Ditto flower do.
		Carried over, ...	593	2077	81	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Seharunpore, during the year 1861.

Month and Date.		Name of Parties applying and supplied.	Fruit trees.	Timber, shrub and Flower Plants.	Parcel of seed.	Remarks.
		Brought forward, ...	593	2077	81	
August	7th	Captain W. H. Blowers, Sub-Assistant Commissary General, Nusscerabad, ...	0	0	1	Vegetable seeds.
	8th	Mr. J. Brown, Kulsea, ...	0	0	2	Ditto and flower Do.
		Captain Hume, 80th Regiment, Nowgong, ...	0	0	1	Vegetable do.
		Kureem Khan, Scharunpore, ...	10	0	0	Fruit trees.
		Hoseinbux, ditto, ...	25	0	0	Ditto do.
	9th	Captain G. Alexander, 93rd Highlanders, Rawul Pindee,	0	0	2	hrub and flower do.
		Kalas Chunder, Deputy Post Master, Seharunpore, ...	4	1	0	Fruit and bail plants.
	10th	Mr. H. Judd, Deputy Commissioner's Office, Umballa,...	0	0	1	Beans and Cabbage seeds.
		The Superintendent of Divisional Police, Ghazeepore, ...	0	0	2	Vegetable and flower do.
		W. Wilmer, Esq., 90th Light Infantry, Allahabad, ...	0	0	2	Flower and shrub do.
		Choudrie Bahadur Singh, for Maharaja of Putiala, ...	0	0	7	Timber do.
	12th	Sumunda Khan, Seharunpore, ...	42	0	0	Fruit trees.
		Vuheedoodeen, ditto, ...	191	25	2	Fruit and shrub plants, also timber seeds.
	13th	Mr. George Best, Roorkee, ...	0	0	2	Vegetable and flower do.
		Kazum Ali, Seharunpore, ...	1,038	12	0	Fruit and cypress plants.
		Fazool Hussun, ditto, ...	167	60	0	Fruit and shrub plants.
	14th	Captain Williams, Roorkee, ..	80	11	0	Ditto do.
		Ditto, for Government College Garden, Roorkee, ...	70	20	0	Ditto do.
	15th	Colonel D. Pott, Commanding 7th Native Infantry, Jounpore, ...	0	0	2	Vegetable and flower seeds.
		Captain Tulloch, Sealkote, ...	0	0	2	Ditto do.

	L. Jordon, Esq., Her Majesty's 34th Regiment, Fyzabad, Oude, ...	0	0	2	Ditto do. do.
16th	The Officer Commanding Her Majesty's 90th Regiment of Light Infantry, Allahabad, ...	0	0	6	English vegetable seeds.
	Ditto, ditto, ditto,	0	0	3	Ditto flower do.
	Hurdwaree Lall, Sooltanpore, zillah Seharunpore, ...	106	6	0	Fruit and shrub plants.
17th	Dr. Corbyn, Meerut, ...	55	54	0	Ditto do. do.
19th	H. Cannon, Esq., Superintendent Jail buildings, Lucknow,	0	0	1	Vegetable seeds.
	Mr. H. T. Gaunissee, Allahabad, ...	0	0	3	Vegetable, flower, and timber do.
	Mr. D. Anselme, Allahabad, ...	0	0	3	Ditto do. do.
	Dr. Tressider, 42nd Native Infantry, Agra, ...	0	0	1	Vegetable do.
	Captain Thurburn, Deputy Commissioner Mohumdee, Lutcheempore, Oude, ...	0	0	2	Vegetable and flower do.
20th	Ubdul Ruzak, Seharunpore, ...	88	0	0	Fruit trees.
	Anoop Singh, ditto, ...	156	75	0	Ditto and shrub plants.
	Murdan Ali, ditto, ...	70	0	0	Fruit trees.
	Thakur Doss, ditto, ...	155	64	0	Ditto and shrub ditto.
	Roshun Ali, Meenranpore Jansuth, Mozuffernugger, ...	10	14	0	Fruit trees.
	Mrs. Powell, Seharunpore, ...	0	0	2	Vegetable seeds.
21st	Captain Williams, for Government College Garden, Roorkee,	83	19	0	Fruit and shrub plants.
	Ditto, ditto, ditto, ...	78	7	0	Ditto do. do.
	Shah Ali Ahmud, Ambhata, Seharunpore, ...	38	35	0	Ditto do. do.
	The Private Secretary to the Hon'ble the Lieutenant Governor, North Western Provinces, Nynee Tal, ...	0	0	1	English vegetable seeds.
	Ditto, ditto, ditto,	0	0	1	2 lbs. Lucerne do.
	Mrs. Powell, Seharunpore, ...	4	0	0	Leechie plants.
22nd	Captain C. James, Goonah, ...	0	0	2	Vegetable and flower seeds.
	Mr. H. Blewitt, Delhie, ...	0	0	2	Ditto do. do.
	Lieutenant H. G. Saunders, D. D., H. M.'s 107th Regiment, Agra, ...	0	0	1	Flower seeds.
	Imrutroy, Seharunpore, ...	48	4	0	Fruit and cypress plants.
23rd	The Officiating Magistrate Bareilly, ...	0	0	1	Vegetable seeds.
	W. Harley Esq., Anarkullie, ...	0	0	2	Vegetable and flower do.
	R. B. Anderson, Esq., Scalkote, ...	0	0	2	Ditto do. do.
	Carried over,	3,111	2,484	142	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Seharunpore, during the year 1861.—(Continued.)

Month and Date.		Name of parties applying and supplied.	Fruit Trees.	Timber, Shrub, and Flower Plants.	Parcel of Seed.	Remarks.
		Brought forward, ---	3,111	2,484	142	
August	24th	Mr. Beckett, Kurnaul, ...	0	0	2	Vegetable and flower seeds.
		Major Meade, Political Agent of Gwalior, Seepree, ...	0	0	2	Vegetable do.
		Mr. W. Hind, Deyrah Ismael Khan, ...	0	0	1	Vegetable and gooseberry do.
		Roshun Allie, Meenranpore, zillah Seharunpoor, ...	0	0	1	Vegetable do.
	26th	Kureem-oollah, Seharunpoor, ...	2	4	0	Loquat and cypress plants.
		Mr. J. B. Green, Lucknow, ...	0	0	2	Vegetable and flower seeds.
		Mr. Tomkyns, Roorkee, ...	0	0	2	Flower and creeper do.
	27th	Jwahur Singh, Seharunpoor, ...	4	31	0	Fruit and shrub plants.
		Shibsurom, of Ismaelpore, zillah Seharunpore, ...	31	2	0	Fruit and cypress plants.
		Gussoo Mull, Seharunpore, ...	36	28	0	Ditto and shrub plants.
	28th	Mr. M. Constantine, Allahabad, ...	0	0	3	Vegetable, flower, and timber seeds.
		Mr. F. Coxen, E. I. R. Thana Dadree, zillah Boolundshahur,	0	0	2	Vegetable and flower do.
		Mr. J. M. Maloney, Moradabad, ...	0	0	2	Ditto do. do.
		W. Scott Esq., Mehidpore, ...	0	0	2	Beans and Lucerne do.
	29th	Hosein Khan, Seharunpore, ...	6	2	0	Fruit and cypress plants.
		Mahomud Sudeek, Zilladar of Canal, Seharunpoor, ...	83	0	0	Fruit trees.
		Mrs. Julia Powell, Seharunpore, ...	0	0	2	Flower seeds.
		Mr. Courtenay, Delhie, ...	0	0	2	Vegetable and flower do.
		Lieut. Colonel Maclagan, Chief Engineer, Lahore, ...	0	0	2	Vegetable and flower do.
	30th	Dr. J. E. T. Aitchison, Jheelum, ...	0	0	1	Timber do.
		Total, ...	5,273	2,551	168	

		September 1861.				
September	2nd	Mr. A. H. Ten Broeke, Roorkee, ...	0	2	1	Wax plants and peas.
		Mrs. Moore, Roorkee, ...	0	108	2	Bulbs, vegetable, and flower seeds.
	3rd	Lieutenant Graham, Superintendent of Police, Etah, ...	0	0	1	Vegetable do.
		Captain W. B. Peile, Dinapoor, ...	0	0	2	Ditto and flower do.
		Mr. J. Roberts, Meerut, ...	0	0	1	Vegetable do.
	4th	A. Brind Esq., Deputy Superintendent E. J. Canal, Seharunpore, ...	0	0	2	Vegetable and flower do.
		G. P. Rae, Esq., Roorkee, ...	0	0	2	Ditto do. do.
		The Officer Commanding 4th Battery 14th Brigade Royal Artillery, Allahabad, ...	0	0	2	English vegetable do.
		Ditto, ditto, ditto,...	0	0	1	Ditto flower do.
	5th	Captain Shaw, 7th Hussars, Umballa, ...	0	0	2	Vegetable and flower do.
	6th	The Superintendent Government Garden, Bangalore, ...	0	0	1	Caubul peach stones.
		Mr. J. G. Harding, Allahabad, ...	0	0	3	Vegetable, flower, and timber seeds.
		Mr. C. Walker, Allahabad, ...	0	0	3	Ditto do. do.
		Lieut.-Colonel Hinde, Her Majesty's 10th N. I. Dinapore,	0	0	2	Vegetable and flower do.
	7th	Reverend Dr. Carshore, Umritsur, ...	0	0	2	Ditto do. do.
	9th	Dr. Wilson, Civil Surgeon, Roorkee, ...	0	0	2	Ditto do. do.
		Mr. J. Miller, Lukheempoor, Oude, ...	0	0	2	Ditto do. do.
	10th	F. Brown, Esq., Lucknow, ...	0	0	1	200 China almonds or moong-phuis.
		Mr. J. C. Jore, Allahabad, ...	0	0	2	Vegetable and flower seeds.
		Mr. C. Freese, Lukheempoor, Oude, ...	0	0	2	Vegetable and flower do.
	11th	Mrs. S. C. Thorpe, Lucknow, ...	0	0	2	Ditto do. do.
		Captain Owen, D. P. W., Mussoorie, ...	0	0	2	Ditto do. do.
		General Innis, Simla, ...	0	0	2	Ditto do. do.
		Carried over, ...	0	110	42	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Seharunpore, during the year 1861.—(Continued.)

Month and Date.		Name of parties applying and supplied.	Fruit Trees.	Timber, Shrub, and Flower Plants.	Parcel of seed.	Remarks.
		Brought forward, ...	0	110	42	
September	11th	Major H. A. Brownlow, Superintendent E. J. Canals, Seharunpore, ...	0	0	1	Quarter Seer Lucerne seeds.
	12th	The Collector of Moradabad, ...	0	0	1	Vegetable do.
		Mr. W. J. Blewitt, Delhie, ...	0	0	1	Flower do.
		Colonel Smyth, Mussoorie, ...	0	0	2	Ditto, and vegetable do.
		B. D. Hayes Esq., Delhie, ...	0	0	3	Vegetable, Lucerne and clover do.
		Mr. C. H. Billing, Delhie, ...	0	0	2	Vegetable and flower do.
	13th	S. J. Becher, Esq., Seharunpoor, ...	0	0	1	Vegetable do.
	16th	Mr. H. Taylor, Roorkee, ...	0	0	2	Ditto and flower do.
		Mr. W. Davis, Ditto, ...	0	0	2	Ditto do. do.
		S. J. Becher, Esq., Seharunpoor, ...	0	21	0	Flowering shrubs.
	18th	Major Patton, Agra, ...	0	0	2	Flower seeds.
		F. R. Hogg, Esq., Seharunpore, ...	0	200	3	Celery plants, vegetable, and Lucerne do.
		Government Tea Plantation, Kaolagir, Deyrah Dhoon, ...	0	0	1	Vegetable do.
		Mr. Powell, Seharanpore, ...	0	4	0	Poplar plants.
	20th	G. W. P. Dorrett, Esq., Allahabad, ...	0			Vegetable and flower seeds.
		Dr. Tressider, Agra, ...	0	0	2	Beans and flower do.
		M. Sandys Esq., Shahjehanpoor, ...	0	0	2	Vegetable and flower do.
		T. Smith, Esq., Agra, ...	0	0	2	Ditto and do. do.
				0		
	21st	Honorable R. Drummond, Shahjehanpoor, ...	0	0	2	Ditto do. do.
		William Baker, Esq., Lucknow, ...	0	0	1	Flower do.
		J. Archer, Esq., Ditto, ...	0	0	2	Ditto and vegetable do.

	James Conway Esq., Ditto, ...	0	0		Dahlia and other flower do.
	J. H. Maling, Esq., 45th N. I., Morar, Gwalior, ...	0	0	2	Vegetable and flower do.
	Hosain Allie Khan, Tehseeldar of Deobond, zillah Seharunpore, ...	0	0	1	Vegetable seeds,
	Zoolfkar Allie, Seharunpoor, ...	71	48	0	Fruit and shrub plants.
23rd	Mr. Eldred, ditto, ...	0	0	2	Vegetable and flower seeds.
	R. C. Clifford, Esq., H. M.'s 48th Regt., Roy Bareilly,	0	0	2	Ditto do. do.
	Captain Paterson, Commanding 10th Police Battalion, Patna, ...	0	0	2	Ditto do. do.
	Mr. H. Webb, Moradabad, ...	0	0	2	Ditto do. do.
	Henry Cope, Esq., Umritsur, ...	0	0	1	Chestnut stones.
	Koodrut Allie, Seharunpoor, ...	0	18	0	Flower plants.
	Lieut.-Colonel H. D. Taylor, Inspector General of Nagpore Police, Nagpore, ...	0	0	2	Vegetable, Lucerne, and other grass seeds.
	Mr. W. B. Joyce, Muttra, ...	0	0	2	Vegetable and flower do.
	C. A. W. Walter, Esq., Officiating Political Agent, Bhurtpore, ...	0	0	2	Ditto do. do.
24th	Captain Mellis, Executive Engineer, Mhow, ...	0	0	1	Flower do.
	Mrs. W. West, Lahore, ...	0	0	2	Vegetable and flower do.
	Mr. J. M. Gordon, Allahabad, ...	0	0	2	Ditto do.
	Captain Perceval, Shahjehanpoor, ...	0	0	2	Ditto do.
	J. H. Rains, Esquire, Umballa, ...	0	0	2	Ditto do.
25th	Mr. Williams, Seharunpore, ...	0	0	2	Ditto do.
	Mr. J. Morgan, ditto, ...	0	0	1	Flower do.
	Mr. W. James, Dadoopoor, ...	0	7	1	Flower plants, and vegetable do.
	The Officiating Collector of Moradabad, ...	0	0	4	Vegetable do.
	The Officer Commanding 3rd Battery 1st Battalion, Bengal Artillery, Lucknow, ...	0	0	2	Vegetable do.
	Ditto ditto, ...	0	0	1	Flower do.
	Doctor C. T. Paske, Seharunpore, ...	0	100	0	Celery plants.
26th	S. J. Becher Esquire, ditto, ...	0	0	2	Vegetable and flower seeds.
	Mr. T. W. J. Wylie, ditto, ...	12	951	0	Fruit, timber, and shrub plants.
	The Officer Commanding Her Majesty's 52nd Regiment Light Infantry, Jhansie, ...	0	0	6	English vegetable seeds.
	Ditto, ditto, ditto,	0	0	3	Ditto do.
	Carried over, ...	83	1,459	126	

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STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Seharunpore, during the year 1861.—(Continued.)

Month and Date.		Name of Parties applying and supplied.	Fruit Trees.	Timber, Shrub, and Flower Plants.	Parcel of seed.	Remarks.
		Brought forward, ...	83	1,459	126	
September	26th	The Officer Commanding 8th K. R. I. Hussars, Meerut,	0	0	6	English vegetable seeds.
		Ditto, ditto, ditto,	0	0	3	Ditto flower do.
	28th	S. J. Becher, Esq., Civil Service, Seharunpore, ...	0	214	0	200 Cabbage plants, and 14 flower plants.
		The Officer Commanding Her Majesty's 34th Regiment Fyzabad, ...	0	0	6	English vegetable seeds.
		Ditto, ditto, ditto,	0	0	3	Ditto flower do.
		The Officer Commanding Her Majesty's 48th Regiment of Foot, Seetapore. ...	0	0	5	Ditto vegetable do.
		Ditto, ditto, ditto,	0	0	2	Ditto flower do.
		The Jail-keeper, Seharunpore, ...	0	0	3	Vegetable, flower, and flax do.
	30th	Doctor A. K. Reed, Attock, ...	0	0	1	Flower do.
		J. Wemyss, Esq., Deyrah, ...	0	0	1	Vegetable do.
		Mr. W. Wilson, Hansie, ...	0	0	2	Ditto and flower do.
		Hossein Allie Khan, Tehseeldar of Deobond, ...	265	118	0	Fruit, timber, shrubs, and flower plants.
		Total, ...	348	1,791	158	
		October 1861.				
October	1st	W. C. Wood, Esq., Assistant Commissioner, Purtabgurh, Oude, ...	0	0	2	Vegetable and flower seeds.
		F. M. Coxen Esq., East Indian Railway, Dadree, zillah Boolundshahur, ...	0	0	1	English flower ditto.

	Mr. Hampton, Jubbulpore, ...	0	0	2	Vegetable and flower seeds.
	Mr. W. P. Warnes, Tehseeldar, Nursingpoor, ...	0	0	2	Ditto do.
2nd	S. J. Becher Esq., Seharunpoor, ...	0	350	0	Beet roots, and Cabbage, and cellery plants.
	Ditto, ditto,	0	10	0	Flower plants.
	N. Elphinstone Esq., Deputy Commissioner, Jullunder, for Public Garden, ...	14	358	3	Fruit, shrub, and timber plants, also timber, shrub, and flower seeds.
3rd	Mr. J. W. Panton, Deyrah Ismael Khan, ...	0	0	3	Fruit, vegetable, and flower ditto.
	M. W. W. Culcheth Esq., Meerut, ...	0	0	2	Vegetable and flower do.
	M. Molyneux, Esq., 23rd R. W. Fusiliers, Lucknow, ...	0	0	2	Ditto do.
5th	Captain WestMorland, Roorkee, ...	0	0	2	Ditto do.
	Lala Nundkishore, Deputy Collector, Seharunpoor, ...	2,100	0	0	Fruit trees.
8th	Dr. J. Hutchinson, Civil Surgeon, Deyrah Dhoon, ...	0	0	1	Peas and Cauliflower seeds.
	Major J. H. Blanshard, Landour, ...	0	0	1	Peas of kind.
	Mr. A. E. Sharpley, Agra, ...	0	0	2	Vegetable and flower seeds.
	A. Grote Esq., President, A. S. Calcutta, ...	0	0	1	Lucerne ditto.
	W. E. Crawford Esq., Lucknow, ...	0	0	1	English flower do.
	Captain J. A. Rowley, Her Majesty's 13th Light Infantry, Goonda, Oude,	0	0	2	English Vegetable and flower do.
	Dr. J. Burr, Jeypore, ...	0	0	2	Ditto do.
9th	Mr. T. Marten, Roorkee, ...	0	0	2	Ditto, do.
	Mr. J. Powell, Seharunpoor, ...	0	0	2	Ditto, do.
12th	Dr. G. Bonavia, Secretary A. H. Society of Oude, Lucknow,	0	0	12	Ditto, do.
	Mr. Brown, Kulseeah, ...	0	0	1	Peas of kind.
	Mr. M. Duncan, Dadoopoor, ...	0	0	2	Vegetable and flower seeds.
	Emamoodeen, Seharunpoor, ...	0	4	0	Flower plants.
14th	W. Dickey Esq., Officiating Chief Engineer, Nagpore, ...	0	0	2	Vegetable and flower seeds.
	The Officer Commanding Her Majesty's 46th Regiment, Jullunder,	0	0	6	English vegetable seeds.
	General A. Dick, Mussoorie, ...	120	20	0	Fruit and shrub plants.
	Carried over, ...	2,234	742	56	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Scharunpore, during the year 1861.—(Continued).

Month and Date.		Name of Parties applying and supplied.	Fruit Trees.	Timber, Shrub, and Flower Plants.	Parcel of seed.	Remarks.
		Brought forward, ...	2,234	742	56	
October	15th	Mr. Eldred, Scharunpoor, ...	0	5	0	Flower plants.
	16th	Lieut. Col. A. D. Turnbull, Engineers, Roorkee, ...	0	0	2	Three seers Lucerne seeds.
		W. Thomson Esq., Civil Assistant Surgeon, Goorgaon, ...	0	182	2	Bulbs and cuttings, also vegetable and flower seeds.
		F. R. Hogg Esq., Civil Service, Scharunpoor, ...	3,000	0	0	Strawberry plants.
		Gunashee Lall, Native Drawing Master, Government College, Roorkee, ...	4	0	0	Leechie plants.
	17th	Khodabux, Jullunder, ...	6	2	0	Fruit and cypress plants.
		J. W. Williams Esq., Meerut, ...	0	0	1	Vegetable seeds.
	18th	O. Mallitte Esq., Bareilly, ...	0	0	2	Ditto and flower do.
		J. W. Siddall Esq., Meerut, ...	0	0	1	Vegetable do.
		Captain W. C. Pearson, 88th Regiment, Moradabad, ...	0	0	1	Vegetable do.
		The Collector of Moradabad, ...	0	0	1	Peas of kind.
	19th	Mr. Eldred, Scharunpore, ...	0	7	0	Herb and flower plants.
		Mr. M. Duncan, Dadoopore, ...	0	86	0	Flowering shrubs.
		R. Egerton Esq., Dhurmsalla, ...	1,082	0	0	Fruit plants.
		William Scott, Esq., 19th Regt., Mehidpore, ...	0	0	1	Vegetable seeds.
	21st	Mr. Eldred, Scharunpoor, ...	0	33	0	Timber plants.
		Mr. G. E. Powell, ditto, ...	24	0	0	Fruit plants.
	22nd	Mr. Eldred, to, ...	1,000	0	0	Strawberry plants.
		Mr. J. Lamb, Roorkee, ...	14	17	2	Fruit and shrub plants, also vegetable and flower seeds.

	23rd	Dr. Kendall, 7th Hussars, Umballa,	0	33	0	Flowering shrubs.
		The Officer Commanding Her Majesty's 88th Regiment, Moradabad, ...	0	0	5	Vegetable seeds.
	24th	Lieut.-Colonel Bourchier, Meean Meer, ...	0	0	2	Vegetable and flower seeds.
		Mr. E. R. Lemastre, Bijnour, ...	298	126	2	Fruit and shrub plants, and vegetable and flower seeds,
	26th	Mr. E. H. Shuldham, Delhie, ...	0	0	2	Vegetable and flower seeds.
	28th	The Officer Commanding 1st Battalion 13th Light Infantry, Gonda, ...	0	0	10	English vegetable seeds.
		Ditto, ditto, ditto.	0	0	5	English flower seeds.
		Lieut.-Colonel A. D. Turnbull, Engineers, Roorkee,...	0	0	6	Imphee seeds.
	30th	Conductor Gardener, Lullutpore, ...	0	0	2	Vegetable and flower seeds.
		Captain J. P. Cambridge, Subathoo, ...	0	0	1	English flower seeds.
		Revd. J. L. Hanser, Bijnour, ...	0	0	2	Vegetable and flower do.
		Captain Cumberland, Almorah, ...	0	0	2	Vegetable seeds of kind.
		Ditto ditto,	0	0	1	Lucerne and clover seeds.
		Ditto ditto, ...	0	0	1	Flower seeds.
		Reverend J. R. Campbell, Scharunpore, ...	2,000	0	0	Strawberry plants.
	31st	Mr. Eldred, Seharunpore, ...	0	10	0	Shrub plants.
		J. Robertson, Esq., Executive Engineer, Umballa, ...	44	0	0	Fruit trees.
		Total, ...	9.706	1,243	110	
		November 1861.				
November	4th	Mr. E. R. C. Wilcox, Lucknow, ...	0	0	3	Vegetable, flower, and cotton seeds.
		J. H. Goose, Esq., Delhie, ...	0	17	0	Geranium cuttings.
		Major Wemyss, Deyrah Dhoon, ...	0	0	1	French beans.
		Captain H. R. Hodgson, 55th N. I. Morar, Gwalior, ...	0	0	2	Vegetable and flower seeds.
		N. Elphinstone, Esq., Deputy Commissioner, Jullunder,...	0	8	0	Shrub plants.
	5th	Captain E. Tulloch, Sealkote, ...	0	0	1	Beans of kind.
	7th	Dr. Henry Cape, Croydon, ...	0	0	1	Cucurbitacea seeds.
		Carried over,	0	25	8	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Gvoernment Botanical Garden at Seharunpore, during the year 1861.—(Continued).

Month and Date.		Name of Parties applying and supplied.	Fruit Trees.	Timber, Shrub and Flower Plants.	Parcel of seed.	Remarks.
		Brought forward, ...		25	8	
November	7th	Dr. Bonavia, Secretary A. H. Society, Lucknow, ...	0	0	2	mber and shrub seeds.
		Choudry Bahadur Singh, for Maharajah of Puttiala, ...	0	0	2	Vegetable and flower seeds.
	9th	J. H. Raines Esq., Umballa, ...	0	0	3	Ditto and shrub do.
	13th	Mr. R. Goode, Store Inspector, Punjaub Railway, Lahore,	0	90	4	Bulbs of kinds, vegetable, flower, fruit, and Lucerne seeds.
		J. Carey, Esq., Jubbulpore, ...	0	0	2	Vegetable and flower seeds.
		Oomrave Singh, Sheerkote, zillah Bijnour, ...	2,306	394	2	Strawberry and other fruit plants; shrub and flower plants; also vegetable and flower seeds.
		Rev. J. R. Campbell, Seharunpore, ...	0	48	0	Shrub and flower pl ants.
		Husson Mohumud, Peishkar, Tehseel Seharunpore, ...	0	50	0	Cabbage plants.
	14th	John Michel Esq., Hindun, *via* Delhie, ...	0	0	2	Vegetable and flower seeds.
		Muttra Doss, Bijnour, ...	666	169	0	Fruit and shrub plants.
	20th	The Overseer Government Tea Plantation, Hawulbaugh, Almorah, ...	0	0	2	Vegetable and flower seeds.
	23rd	J. Vans Agnew, Esq., C. S., Seharunpore, ...	3,000	0	0	Strawberry plants.
	25th	Lieutenant C. F. Sharpe, Superintendent Police, Sultanpore, Oude, ...	0	0	2	Vegetable and flower seeds.
		H. B. Armstone Esq., Thanasur, ...	0	0	2	Ditto do.
		W. Reynold, Esq., Her Majesty's 19th Regiment, Mehidpore, ...	0	0	1	Lucerne seeds.
		E. H. Kearney Esq., Allygurh, ...	0		2	Vegetable and flower seeds.

	27th	V. A. McLeod, Esq., Futtehgurh, ...	0	0	2	Vegetable and flower seeds.
		Mr. J. Morgan, Seharunpore, ...	1,000	76	0	Strawberry and flower plants.
	30th	Choonee Lall, Mallie, Kunkhull, Seharunpore, ...	2,000	0	0	Strawberry plants.
		Total, ...	8,972	852	36	
		December 1861.				
December	4th	The Officer Commanding 92nd Highlanders, Kussowlee, ...	0	0	8	English vegetable seeds.
		Ditto, ditto, ditto, ...	0	0	2	Flower seeds.
		Dr. C. T. Paske, Seharunpore, ...	0	4	0	Poinsettia plants.
	5th	Dr. J. S. Woods, ditto, ...	0	0	1	Onion seed.
		Colonel Mant, Bath, England, ...	0	0	2	Deodar and hill seeds.
		Dr. Lane, Ludbrooke, Richmond, ...	0	0	1	Hill seeds.
		Mr. Curdey, Bath, England, ...	0	0	2	Deodar and hill seeds.
		Mr. Tilley, ditto, ...	0	0	2	Ditto do.
		Dr. Watson, India Office, London, ...	0	0	2	1½ Maund of Deodar seed.
		Ditto, ditto, ...	0	0	1	20 Seers pine and Deodar seed.
		Ditto, ditto, ...	0	0	1	Atees tubers or *(Aconitum heero-phyllum.)*
		Ditto ditto ...	0	0	1	Bish tubers or *(aconitum ferox)*.
		Botanical Garden, Dublin, ...	0	0	1	Hill seed.
		Ditto, ditto, Belfast, ...	0	0	1	Ditto.
		Royal Botanical Garden, Kew, ...	0	0	1	Ditto.
		Dr. Cleghorn, Madras, ...	0	0	2	Deodar seed.
		Messrs. Low and Co., Clapton, England, ...	0	0	1	Ditto.
		H. Field, Esq., St. Petersburgh, ...	0	0	1	Hill seeds.
		J. Wilson Esq., London, ...	0	0	1	Ditto.
		Royal Botanical Garden, Edinburgh, ...	0	0	1	Deodar seed.
		Messrs. Lawson and Co., Edinburgh, ...	0	0	1	Ditto.
		Messrs. Veitch and Co., Exotic Nursery, Exeter, ...	0	0	2	Ditto.
		— Layard Esq., Wales, ...	0	0	2	Deodar seeds.
		Ditto, ...	0	0	1	Hill seeds.
		— Gillebrand, Esq., Surrey, ...	0	0	1	Ditto.
		Mrs. Torrie, Edinburgh, Scotland, ...	0	0	2	Deodar and hill seeds.
		Dr. Balfour, Royal Botanical Garden, Edinburgh, ...	0	0	1	Atees tubers *(Aconitum heero-phyllum.)*
		Carried over, ...	0	4	42	

STATEMENT showing the distribution of Plants, Seeds. &c., from Her Maiesty's Government Botanical Garden at Seharunpore, during the year 1861.—(Continued.)

Month and Date.		Name of Parties applying and supplied.	Fruit Trees.	Timber, Shrub, and Flower Plants.	Parcel of seed.	Remarks.
		Brought forward, ...	0	4	42	
December	5th	Botanical Garden, Calcutta, ...	0	0	1	Deodar seed.
		Mrs. Saul Carlysle, ...	0	0	1	Ditto.
	9th	Revd. J. R. Campbell, Seharunpore, ...	0	100	2	Rose cuttings, and vegetable and flower seeds.
	10th	S. Berkeley Esq., Delhie, ...	63	46	0	Fruit and shrub plants.
	12th	Mr. J. Rennell, Deyrah Dhoon, ...	25	0	0	Grafted Malda mangoe plants.
		Dr. G. W. Bonavia, Secretary A. H. Society, Lucknow,	0	0	20	Timber seeds.
		Ditto, ditto, ditto,	0	0	4	Fruit do.
		Ditto, ditto, ditto,	0	0	1	English vegetable seeds.
		Ditto, ditto, ditto,	0	0	1	Shrub do.
		Ditto, ditto, ditto,	0	0	1	Creeper.
		Ditto, ditto, ditto,	0	0	1	Lucerne.
		Ditto, ditto, ditto,	0	0	2	Pine and deodar do.
		Ditto, ditto, ditto,	526	1,063	0	Fruit, timber, and shrub plants.
		Ditto, ditto, ditto,	13,400	30,300	0	Fruit and shrub cuttings.
		Ditto, ditto, ditto,	0	10,000	0	Agavee plants.
	16th	The Overseer Government Tea Plantation, Hawulbaugh,	0	0	2	Vegetable seeds.
		S. J. Becher Esq., Judge, Seharunpore, ...	0	72	0	Flowering shrubs.
	17th	Mr. R. Foster, Seharunpore, ...	44	108	2	Fruit and shrub plants, also vegetable and flower seeds.
	21st	Captain Morgan, Acting Conservatory of Forests, Ootacamund, ...		0	2	Tea seeds, 8 lbs.

21st	Dr. Oswald, in charge of Forsets, Mysore Commission, Shemoga, ...	0	0	1	Tea seeds, 4 lbs.
	Mr. E. Hall, Overseer, Forest Department, Neilgherry Hills, Coonoor, ...	0	0	1	Ditto do., 4 lbs.
	Mr. William New, in charge of Government Garden, Bangalore, ...	0	0	5	Vegetable, flower, creeper, shrub, and timber seeds.
	John Rohde, Esq., Inspector General of Jails, Ootacamund,	0	0	5	Ditto do. do. do.
	The Officer Commanding 7th Hussars, Umballa, ...	0	0	10	English vegetable seeds.
23rd	Surdar Runjoora Sing, of Mujeeth, zillah Umritsur, ...	69	0	0	Fruit trees.
24th	Mr Powell, Roorkee, ...	0	77	0	Flowering shrubs.
	The Overseer Government Tea Plantation, Hotta, Kangra,...	0	0	1	English vegetable seeds.
26th	Messrs. J. Jones and Co., Umballa, ...	91	0	0	Fruit trees.
27th	Captain Morgan, Acting Conservator, Forests, Ootacamund,	0	0	2	Tea seeds.
	Major Ivie Campbell, Deputy Commissioner, Ceded Districts, Beron, Ellichpore, ...	0	0	2	Ditto do.
	The Officer Commanding Mercara Coongly, Neysere, Madras, ...	0	0	2	Tea seeds.
	C. W. R. Thwaits, Esq., Superintendent Botanical Gardens, Peadenia, Ceylon, ...	0	0	4	Tea seeds.
28th	Nund Lall, Dehra Doon, ...	39	8	0	Fruit and shrub plants.
	Henry Cope Esq., Umritsur, ...	0	0	10	Timber seeds.
	Ditto, ditto, ...	0	0	4	Shrub do.
	Ditto, ditto, ...	0	0	12	Fruit do.
	Revd. J. R. Campbell, Seharunpore, ...	0	90	0	Shrub plants.
	Choudrie Bahadur Singh, for Maharaja of Putiala, ...	521	704	0	Fruit and shrub plants.
	Dr. Farquhar, M. D., Mussoorie, ...	0	4	0	Flower plants.
	Mrs. T. Tronson, Mussoorie, ...	0	20	0	Ditto.
	J. Lemarchand Esq., Landour, ...	0	52	0	Flowering shrubs.
	Mrs. General Hoggan, Mussoorie, ...	16	0	0	Fruit plants.
	Carried over, ...	14,794	42,648	141	

STATEMENT showing the distribution of Plants, Seeds, &c., from Her Majesty's Government Botanical Garden at Seharunpore, during the year 1861.—(Concluded.)

Month and Date.		Name of Parties applying and supplied.	Fruit Trees.	Timber, Shrub, and Flower Plants.	Parcel of seed.	Remarks.
		Brought forward, ...	14,794	42,648	141	
		Mr. Archer, Meerut, ...	0	12	0	Flower do.
		Captain H. Skinner, Landour, ...	0	42	0	Flowering shrubs.
		Conductor H. Reilly, Overseer, D. P. W., Landour, ...	0	8	0	Ditto do.
		Captain F. Alexander, Invalid Establishment, Landour, ...	0	6	0	Deodar plants.
		Major E. Swetenham, Mussoorie, ...	32	0	0	Fruit do.
		Captain H. Jervis, Mussoorie, ...	54	0	0	Fruit plants.
		Major J. H. Blanshard, Mussoorie, ...	0	8	0	Timber do.
		Mrs. M. W. Fullerton, Landour, ...	0	30	0	Flowering plants.
		Colonel W. C. Campbell, late 30th Regiment Native Infantry, Dehra Dhoon,	14	0	0	Fruit plants.
December	29th	Captain Orman, Mussoorie, ...	0	4	0	Herbs.
		N. Elphinstone Esq., Deputy Commissioner, Jullunder, for Public Garden, ...	2,500	187	0	Strawberry plants, and flowering shrubs.
		Captain Reid, Mussoorie, ...	26	0	0	Fruit plants.
		H. W. Wheeler Esq., ditto. ---	42	0	0	Ditto do.
		J. Becket Esq., Senior Assistant Commissioner, Ghurwal,	31,000	0	0	Strawberry plants.
		Mr. W. G. McIvor, in charge of Government Garden, Ootacamund, ...	0	0	5	Vegetable, flower, creeper, shrub, and timber seeds.
		F. R. Hogg, Esq., Seharunpore, ...	4,000	0	0	Strawberry plants.
		Major H. A. Brownlow, ditto, ...	4,000	0	0	Ditto do.
		Total, ...	56,462	42,945	146	

ABSTRACT.

January, ...	28,011	1,201	35
February, ...	1,218	2,349	170
March, ...	268	2,476	110
April, ...	160	1,446	78
May, ...	102	137	80
June, ...	743	625	273
July, ...	1,174	442	254
August, ...	5,273	2,551	168
September, ...	348	1,791	158
October, ...	9,706	1,243	110
November, ...	8,972	852	36
December, ...	56,462	42,945	146
Total, ...	1,15,437	58,058	1,618

OFFICE OF THE SUPERINTENDENT, BOTANICAL GARDENS, N. W. P.,
Scharunpore, the 26th May 1862.

W. JAMESON, Surgeon Major,
Superintendent, Botanical Gardens,
North Western Provinces.

Report on the working of the Botanical Gardens at Seharunpoor, during the year 1861.

From Secretary to Government, North Western Provinces, to the Superintendent Botanical Gardens, North Western Provinces, Seharunpore, (No. 1672 A.)—Dated Nynee Tal, the 20th June 1862.

SIR,—I am directed to acknowledge the receipt of your letter No. 318, dated 26th May, being a report on the working of the Botanical Gardens at Seharunpoor, during the year 1861, and to communicate the following remarks in reply:—

2. It is satisfactorily shewn that the garden continues to fulfil one of its principal purposes with efficiency, in the extensive distribution of Fruit Trees, Timber Trees, and Seeds of all kinds, not only throughout the North Western Provinces, but throughout India, and even in European countries.

3. The duties of the Department have been conducted with much zeal and energy, and the acknowledgments of the Government are due to your *locum tenens*, Dr. J. L. Stewart, as well as to yourself, for bearing in mind the interests of the Garden, even during your temporary absence from India.

4. The reciprocity exhibited by those who have been furnished with Plants and Seeds from the Garden is gratifying.

5. It appears very probable that the produce of the Carob tree, and the particular species of Clover grown in Malta, if they should be successfully raised in India, may become exceedingly valuable as fodder for cattle, and every endeavour should be made to acclimatize and propagate both. Perhaps the Officers attached to the Stud at Seharunpoor may be induced to co-operate with you in your experiments.

6. The Lieutenant Governor congratulates you on the success which has attended the importation, by the Overland Route, of Russian Flax-seed, and on the excellent crop which it has produced. The Government will readily aid you in your further operations, and will be prepared, at the fitting time, to sanction the distribution of prizes for the best specimens of Flax-straw produced by Native cultivators.

7. The Lieutenant Governor fully appreciates the importance of bringing prominently to notice the many valuable fibrous plants that are indigenous to India; and he believes that there is no measure better calculated to accomplish this end than the establishment of an economic Museum, in which the raw materials belonging to the vegetable kingdom should be collected, and be laid open to the inspection of all comers. There can be no doubt that the several Officers of the Government will readily aid in procuring and sending to the Museum specimens of the various articles which you have enumerated, and the collection will be very valuable in view of the publicity which would thereby be given to the existence of many raw products now unknown beyond the site of their growth.

8. The Seharunpoor Garden will afford the most suitable locality for such a Museum, and the Lieutenant Governor will be glad to consider the means of providing a suitable building, which is of course indispensable. With this view an Extract (paragraphs 10-13) from your Report, and (paragraphs 7 and 8) from this reply, will be sent to the Department Public Works.

9. The progress of the Government Tea Plantations, and the large aid given by them in the propagation of the Tea Plant by the distribution of Seed and Seedlings, have been noticed in my reply to your separate report on the subject.

10. Copies of your interesting Report and its enclosure, and of this reply, will be forwarded to the Government of India, with a request that they may be published in a supplement to the *Calcutta Gazette*, for general information.

I have, &c.

G. COUPER,

Secretary to Government,

North Western Provinces.

ART. V.

REPORT ON VACCINATION IN ROHILCUND, KUMAON AND GURHWAL.

Report on Vaccination in Rohilcund, Kumaon, and Gurhwal.

By Dr. F. Pearson, *Assistant Surgeon,*

Superintendent of Vaccination in Rohilcund, Kumaon, and Gurhwal.

I have the honor to submit, for the information of His Honor the Lieutenant Governor, North Western Provinces, my Annual Report for the year 1861-62:—

Mahamurree Plague.—I am happy to say that during the past year there has been no outbreak of the disease, in either Kumaon or Gurhwal. I unhesitatingly attribute the immunity to the continued perseverance in sanitary measures. These measures have been fully described in former Reports; they consist mainly in the compulsory exclusion of the cattle from the dwelling-houses *in* the villages to sheds erected outside. Notwithstanding, however, the manifest advantages accruing to the people—apparent in the greater comfort of cleanliness of their homes and freedom from sickness—they yet cling with strange pertinacity to their old ways, and yield only in obedience to the law. In conversation a few days ago with a high official from the Court of Nepaul, he informed me that Mahamurree was quite unknown in his country, and that, with the exception of its *not* being the custom to house the cattle inside the villages, the habits of the people and character of the climate in no way differed from those of Kumaon and Gurhwal. This corroborative testimony to the right diversion of our efforts for the abolition of plague should confirm us in our course, however temporarily distasteful to the people, feeling assured that eventually the humane intentions of Government will be understood and felt.

Gurhwal Pilgrim Dispensaries.—A full history of these Institutions was given in my last Annual Report, and it is therefore unnecessary again to allude to them, beyond stating that their working has been satisfactory during the past year. The parent Dispensary at Sreenuggur is under the charge of a Sub-Assistant Surgeon, and from this circumstance alone it will always command popularity and enjoy the confidence of the people, for the benefits arising from scientific treatment of disease and surgical skill become rapidly known, and all classes learn to recognize and appreciate them. The Branch Dispensaries (six in number) in Gurhwal, as elsewhere, are in charge of Native Doctors only. As a general rule, I consider all Branch Dispensaries (unless under constant skilled supervision) of very doubtful utility, when compared with the expense incurred. The absence of surgical knowledge, and consequent inability of the Native Doctors to operate, deprives these Institutions of the usefulness and reputation they might otherwise enjoy amongst the Hill people. The natives are slow to avail themselves of *medical* treatment only, evincing a strong disinclination to leave their own houses and the nursing they can there receive to undergo a protracted stay in comfortless wards under strangers' hands. This feeling is particularly strong with the Hill population, and the benefits consequently conferred by the Branch Dispensaries are less in this respect than could be wished. But viewing these Institutions in the light in which they should be regarded—in fact, for the purposes for which they were built, viz., the relief of pilgrims—they are an undoubted success, and I believe are the cause of saving a vast number of lives annually, for it is into these wayside asylums that the weary pilgrim steps to rest awhile his tired limbs and recruit his exhausted frame ere prosecuting his further jour-

Report on Vaccination in Rohilcund, Kumaon, and Gurhwal.

ney. Most of their ailments are the result of fatigue and poor food: in these homes they find the rest and care they stand so much in need of.

Vaccination in Rohilcund.—The order for concentrating the whole strength of the Rohilcund Vaccine Establishment (34 Vaccinators, two Native Superintendents, and one Deputy Superintendent), upon the two Zillahs of Bijnore and Moradabad was carried out this season: and I feel confident that the wisdom of the change will be apparent ere three or four more years have elapsed. The fact of several thousands of persons being annually successfully protected by Vaccination *must* make an impression upon the ravages of small-pox, and convince the Natives of the power of the English remedy. When once the apathy of the Native and his disbelief in its efficacy are broken, the present expenses and difficulties of its introduction will cease. Much has already been accomplished in this way; for even at the present time, notwithstanding all our disadvantages of being able to work only during the cold months, and then chiefly amongst unwilling subjects, the rate per head for each successful case is somewhat under one shilling, a sum considerably lower than the cost charge per head in England. The numbers vaccinated in the Zillahs of Bijnore and Moradabad, during the past season, are given in the Return below:—

Successful.	Unsuccessful.	Doubtful.	Result unknown.	TOTAL.
17,761	7,274	2,969	3,859	31,863

The large percentage of unsuccessful cases (nearly one-third) is a source of much regret, but one I fear not likely to be ever materially diminished, for the unpreventible (under present circumstances) exposure of the bare arms of the young naked urchins operated upon to the glare of the sun, dust, flies, and every other possible conceivable source of injury, contributes to this unfortunate result. During my tour through the district, I distributed a large number of my Vaccine Pamphlets, and took every opportunity of securing the aid of influential Natives in the progress of Vaccination. It will take time to sweep away the ignorance and apathy that now so largely prevail regarding it. The Returns submitted may, I feel, be relied on as to their accuracy: the strictest supervision in this matter is exercised to the system pursued in such as to render detection of falsification absolutely certain. Moreover, all motives for falsifying returns have been removed by judging each Vaccinator's work only by the amount of Vaccine crusts supplied. Here is no source of error as to a man's performances, for he cannot manufacture good crusts, except by good vaccination. To the most successful Vaccinators (those who have supplied the largest number of good crusts) substantial prizes are given; the incapable are dismissed. Upon no other system can Vaccination ever be carried out with confidence as to its results. I say this after an experience of ten years. The number of operations performed by each Vaccinator has averaged nearly 250 per mensem: a fair average under present circumstances.

Vaccination in Kumaon and Gurhwal.—The six Vaccinators allowed for Kumaon, in the place of the three Native Superintendents reduced on the Rohilcund establishment, were posted out to their several Divisions at the beginning of the season; and, with the four Vaccinators already attached to Gurhwal, these two Provinces

became fully provided for as to their Vaccine requirements. The numbers Vaccinated are given in the Return below:—

Successful.	Unsuccessful.	Doubtful.	Result unknown.	TOTAL.
12,907	1,447	692	331	15,377

Comparing this Return with that of Rohilcund, it will be observed how great is the difference in the percentage of successful cases, showing the favorable effect of the colder climate, not only, I believe, upon the operation of the *virus* itself, but also in its necessitating the wearing of clothes, and so protecting the vesicle on the arm from the various injuries it is exposed to on Plain's subjects. The number of operations performed by each Vaccinator is about the same as on the Plains, viz., 250 per mensem. In the Hills it is hardly possible to do more; for the villages are small and widely scattered. In the Plains, however, a larger number should hereafter be attained.

There has been a very material increase in the supplies of Vaccine *virus* distributed from the Hill Depôt during the past season, upwards of 12,000 crusts, besides points and glasses, having been sent to the North Western Provinces, Oudh, and Bengal. At no previous period have such constant demands been made upon it. Every call has, I am happy to say, been abundantly responded to; and with a few exceptions, the *virus* sent has been acknowledged as of excellent quality and vigor. The exceptions alluded to were unmistakably the result of the operator's want of knowledge as to the mode of manipulating the crust. To avoid a repetition of any mischances of the same kind, I purpose next season pursuing the plan of "capillary tubes," as recommended by Dr. Husband, of Edinburgh: it being undoubtedly easier of application, and therefore less liable to failure than the crust solution.

I have, &c.

F. PEARSON, *Asst. Surgeon,*

Supdt. of Vaccination in Rohilcund, Kumaon, and Gurhwal.

ART. VI.

Cotton Cultivation in the North Western Provinces.

INFORMATION REGARDING THE CULTIVATION OF COTTON IN THE NORTH WESTERN PROVINCES.

From Secretary Sudder Board of Revenue, to Secretary to Government, North Western Provinces, (No. 470.)—Dated Allahabad, the 24th June 1862.

SIR,—In reply to the orders of Government, in the General Department, dated the 30th September last, No. 2578 A., I am directed by the Sudder Board of Revenue to state, for the information of the Honorable the Lieutenant Governor, that the questions regarding the Cotton crops in these Provinces were circulated in November last, and the replies have reference to the crop then on the ground; that is, the crop sown in the end of June 1861, and gathered towards the close of that year.

2. An abstract of the replies is enclosed. Three of the reports are forwarded in original,* as containing information of interest.

From Collector, Allygurh.
From Collector, Banda.
From Deputy Commissioner, Jaloun.

3. In regard to the average yield per acre, a great variety of statement will be observed—the estimate ranging from six maunds of uncleaned cotton as low as two; and for cleaned cotton, from 1 maund 35 seers, down to 30 seers, and even less. This is partly to be accounted for by the various yield of different soils, rendering it difficult to strike an average; and partly by the fact that cotton, especially in the South-Eastern parts, is often sown along with another crop (as *Arhur, Til,* &c.), and therefore what is represented as the out-turn of an acre may be only part of the crop grown upon it. Perhaps the following estimates may be taken as near the truth, viz., uncleaned cotton, from 4 to 6 maunds; cleaned cotton, from 1⅓ to 2 maunds.

4. In cleaning the cotton, two-thirds of the material in weight is separated as seed, &c. The seed (*benoula*) is used for feeding cattle, and fetches from 13 annas to 1 rupee per maund.

5. The market prices for cleaned cotton vary from 9 and 10 Rupees per maund in the Western districts to 12 and 13 Rupees in the Eastern. In the following table an average rate of Rs. 11 a maund has been assumed, and an average rate of produce, ordinarily at 1½ maund of cleaned cotton per acre.

6. The districts of Dehra, Kumaon, and Gurhwal are omitted, the cultivation being confined to a few hundred acres for local consumption. The Benares Division is also omitted. The crop as a staple for export is unknown; it is only occasionally sown (mixed generally with other crops) for domestic use. The sole exception is in one Tuppah of Mirzapore (Oproudh, between the river Beylun and the Rewah hills), where 3,000 acres grown with cotton are said to yield some 24 seers per acre. Cotton is not cultivated in Goruckpore.

Division.	District.	Roughly estimated area under Cotton: Statute acres.	Estimated yield of clean Cotton: Maund of 80 lbs.	Value at local market rate—Rupees.	Remarks.
		Acres.	*Maunds.*	*Rs.*	
Meerut.	Seharunpore, ...	23,750	35,750	3,93,250	A portion exported to the Punjab, and a portion Eastward.
	Moozuffernuggur, ...	17,000	25,500	2,80,500	About three-fourths exported Eastward.
	Meerut, ...	36,000	54,000	5,94,000	From one-half to three-fifths exported Eastward.
	Boolundshuhur, ...	15,000	25,000	2,75,000	Two-thirds exported Northward and Eastward.
	Allygurh, ...	1,65,000	2,00,000	22,00,000	The area is probably over estimated; about 1,57,000 maunds are exported, chiefly Eastward.
	Total, ...	2,56,750	3,40,250	37,42,750	
Rohilkhund.	Bijnore, ...	23,000	34,500	3,79,500	One-half exported Eastward.
	Moradabad, ...	27,500	42,000	4,62,000	One-half exported to Kumaon and Eastward.
	Budaon, ...	52,500	78,500	9,63,500	Three-fourths exported, chiefly Eastward.
	Bareilly, ...	30,000	50,000	5,50,000	All consumed within the district, which imports a considerable amount for further consumption.
	Shahjehanpore, ...	8,000	8,000	88,000	Insufficient for its own consumption.
	Total, ...	1,41,000	2,13,000	24,43,000	
Agra.	Muttra, ...	68,000	90,000	9,90,000	Collector estimates at only 80,000 maunds, of which about 63,000 are exported Eastward.
	Agra, ...	73,826	1,00,000	11,10,000	About three-fourths exported Eastward.
	Etah, ...	26,000	39,000	4,29,000	About three-fourths sent Eastward.
	Mynpoory, ...	19,000	28,500	3,13,500	A considerable portion exported Eastward.
	Etawah, ...	47,000	70,000	7,70,000	Three-fourths exported Eastward.
	Furruckabad, ...	10,000	15,000	1,65,000	About half is exported North, and East.
	Total, ...	2,43,826	3,42,500	37,77,500	
Allahabad.	Cawnpore, ...	63,000	90,000	1,00,000	About three-fourths exported into Oudh and Eastward.
	Futtehpore, ...	24,000	30,000	3,30,000	Two-thirds exported Eastward.
	Banda, ...	89,000	60,000	8,80,000	Estimate of yield low, because hardly ever sown alone. About seven-eighths exported Eastward.
	Allahabad, ...	27,000	27,000	2,97,000	About three-fourths are exported to Calcutta, Jounpore, Goruckpore, &c.
	Total, ...	2,03,000	2,07,000	16,07,000	
Jhansie.	Lullutpore, ...	2,000	0	0	Grown for Home consumption. Yield estimated at only 10 seers the acre, probably because mixed with other crops.
	Jhansie, ...	28,000	28,000	3,08,000	There is so extensive a carriage of cotton, grown in Independent States, through Jhansie that the Deputy Commissioner finds it difficult to estimate the proportion of his own crop, which follows the same course.
	Jaloun, ...	40,000	35,000	3,85,000	The Deputy Commissioner has not estimated the area. The settlement tables of Calpee shew 14 per cent. of cultivated area under Cotton, and on this the present estimate is founded.
	Humeerpore, ...	38,500	34,000	3,74,000	The Collector estimates the yield at only 31 seers per acre, probably because it is sown with other crops.
	Total, ...	1,08,500	97,000	10,67,000	
	Grand Total, ...	9,53,076	11,99,750	1,26,37,250	

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7. The subjoined table shews the proportion which the area under Cotton bears to the whole cultivated area, excepting the Jhansie Division, of which the cultivated area is not yet ascertainable with exactness.

Division.	Cultivated area by last Survey.	Area under Cotton in 1861-62.
	Acres.	Acres.
Meerut, ...	4,029,142	2,56,750
Rohilkhund, ...	4,132,002	1,41,000
Agra, ...	3,474,823	2,43,826
Allahabad, ...	3,128,620	2,03,000
Total, ...	14,764,587	8,44,576

Thus out of 14½ million of acres under crop, about 8,50,000 are cultivated with cotton, that is about $5\frac{5}{7}$ per cent.

8. The estimated aggregate out-turn of clean Cotton (including the Jhansie Division) is twelve hundred thousand maunds, equal to 96 millions of lbs, or 8,57,000 cwts. Of this, probably one quarter is consumed in the districts in which it is grown; one quarter or somewhat less is exported to the north and east for local consumption, and one-half is carried eastward towards Calcutta; but what proportion is destined for eventual exportation by sea there is no means of finding out. Besides this, there is a constant stream of carts passing through Bundlekhund northwards to the Jumna with cotton from the Independent States in Bundlekhund, Gwalior, &c. The statistics of this trade could, if necessary, be checked at the Ghâts on the Jumna.

9. A statement of the market rates for Cotton at the chief marts in these Provinces, from the beginning of 1859 to May 1862, compiled from the monthly prices current, is enclosed. It will be seen that the prices range higher in proportion as you go lower towards Calcutta. The universal tendency likewise is for the rate to rise till June, when, in the prospect of a good harvest, it suddenly falls, to rise again after the crop has been absorbed in the market.

10. It may also be gathered that the prices current are mainly ruled by the plentifulness or scarcity of the local harvest. The average rates in 1859 were beyond all comparison higher than they have been since, even with all the urgency of the European demands. Cotton fetched that year from 15 to 22 Rupees a maund.

11. And herein lies the difficulty of persuading the people to extend their Cotton sowings. Accustomed to great and constant fluctuation in the market rates, they have learned by immemorial experience not to regard the rate which prevails at the time of sowing as any index of what it will be when the harvest is gathered in. The home demand exercises but a vague and inappreciable influence upon the crops. It has long ceased to be *felt* directly by the people. It is lost in the far larger influence arising from the local yield being good or bad.

12. There was a time when it was otherwise. The traditions of the Company's investment still linger among the inhabitants of Calpee and Humeerpoor. In the former district,* "the purchases of Government amounted at one period to forty lakhs a year, and of private individuals it is said to 18 lakhs; since 1830, the former have been discontinued, and the latter have dwindled down to an annual expenditure of barely seven lakhs."

* Mr. Muir's Settlement Report, paragraph 34, written in 1842.

13. What was thus done by the Hon'ble Company in its trading days must now be done by the merchants of Lancashire, and a permanent supply to any extent will then be secured. So long as this is not done, the fluctuations of price in Europe,

however high they may temporarily raise the market rate, will produce little effect upon the breadth of land brought under the Cotton crop.

14. The effect of the dealings of the Commercial Residency in Bundelkhund are even now traceable there.* Agents, deputed from Mirzapore, still visit the district and make advances to the zemindars and cultivators at the time of sowing. In Banda,† the traders sometimes buy up the crop as it stands, and clean it. Elsewhere, the cultivators ordinarily sell or barter their cotton to the village bunniah, who disposes of it in the nearest market; or they part with it to brokers, as in Allygurh. The village price, by buying direct from the cultivator, is stated to be six or eight annas a maund, (from one shilling to one shilling and six pence per cwt.) lower than the local market price. The system of advances to cultivators, or the bespeaking of a crop, seems (excepting in Bundlekhund) to be little known.

* See Major Ternan's Report.

† Mr. Carpenter's Report.

15. How different would have been the state of things from what we now find them, if Agents from English Houses had been posted in the best Cotton tracts in these Provinces;‡ if they had held direct transactions with the cultivators, or even with their brokers; and if thus a constant demand and steady price had been brought to bear upon the production of Cotton? The influence of the European market, which is now hardly, if it all, perceptible in regulating the sowings, would then have told in the most direct and powerful manner.

‡ There are some very pertinent remarks on this aspect of the case, in an Art. on "Cotton culture in India," in the *Edinburgh Review* for April last:—"Now the Cotton interests at large have had it in their power, as they still have it, to place themselves, in concert with these classes of practical agriculturists, to say what they want, and to obtain it at a fair market price dependent upon quality. Suppose the case had been otherwise, suppose Agencies to have been established in all Cotton-producing districts, superintended by intelligent European Agents," *and so on; page* 497.

The advantages anticipated by the writer would certainly follow the adoption of the course he has indicated, and *they can be secured by no other.*

16. The example of Calpee must also be followed in the location of Cotton-screws at such Agencies. Unless the bales are screwed on the spot, the carriage must continue to be slow and expensive. It is understood that unscrewed Cotton cannot be transported at a profit by the Railway. It is needless in this place to advert to the benefit that would accrue from the quality of the Cotton, and its freedom from impurities, being checked by an agent *on the spot.*

17. Cotton in these parts is invariably sown towards the end of June or beginning of July, on the first setting in of the rains. If the commencement of the rains be deferred, the sowings are postponed and the crop suffers. If the delay be very great (as unfortunately does sometimes happen) the crop is lost. Any long suspension of rain between July and September also seriously injures its growth. Such contingencies would of course have to be borne in mind by English speculators in the establishment of Agencies. The crop is gathered from the latter part of October to the beginning of January. The early pickings are the best. The plant is invariably an annual, but (in reference to the question put by Government) it is stated that, when allowed to continue in the ground for a second year, it still bears at the same period.

18. It occurs to the Board that valuable information regarding the Company's Cotton investments in Bundelkhund might be obtained from the old records of the Hon'ble East India Company prior to 1830. The mode of procedure in effecting purchases, the extent to which advances were resorted to, and (a serious point) the degree in which famine or drought affected the investment of the year, might probably be copiously illustrated from those records.

I am, &c.

G. H. M. BATTEN,

Secretary.

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(COPY.)

Abstract of Replies to Board's Circular, No. E. E., dated 11th November 1861, regarding the probable out-turn of the Cotton Crop.

Superintendent Dehra Dhoon; No. 412, dated 17th December 1861.—Cotton cultivation is scattered over the whole of the district; it is certainly not more than 200 acres in the whole of the Dhoon and Jounsar Bawur, and the exact quantity cannot be ascertained. The average produce is 5 maunds "Kupas" per acre in the Dhoon, and 2 maunds per acre in Jounsar Bawur. The cotton cultivated is for the special consumption of the sower; and the district is supplied by importations from the plains. The climate and soil are unfavorable to its growth, and its cultivation is considered unremunerative.

Officiating Collector, Seharunpoor; Demi-Official, dated 7th December 1861.—23,761 acres are devoted to cotton cultivation. The average produce per acre is 2 maunds 28 seers; value at market rate Rs. 8-8-0 per maund; and the estimated proximate value at this rate of the entire cotton is Rs. 5,45,309. It is spun into thread, and also used for quilted clothing for the cold weather, some of it being exported to the Punjaub and down country, but to what amount is unknown. The usual time for sowing cotton is in June, after the first fall of rain, and the period for gathering commences from September to November. The crop is an annual one, and is never allowed to remain for a second or third year.

Collector of Moozuffernugger; No. 2, dated 25th January 1862.—About 17,000 acres are devoted to cotton cultivation, the total cultivated area of the district being about 6,25,000 acres. The average yield is about 2¾ maunds* per acre, the average rate being assumed to be Rs. 2-8-0 per maund. † It is estimated that two-thirds go to waste in giving, and one-third, called "Rooee," is mostly exported in various districts, chiefly Mirzapoor. The price of cleaned cotton is five seers per Rupee. The crop is sown in June, and is picked in November or December; it is invariably annual.

* Cleaned Cotton.

† For uncleaned Cotton.

Collector of Meerut; No. 1, dated 3rd January 1862.—The total amount of land under cotton cultivation is 36,172 acres.‡ The average produce per acre is about 1 maund 20 seers, making the total out-turn 54,258 maunds; the market rate at present is 4 seers 6 chittacks, per Rupee, but it may be assumed at Rs. 7 per maund or 5¾ seers per Rupee, which would show the crop of the district to be worth Rs. 3,79,806. About one-half or three-fifths of the cotton yield are exported to the eastward, immense quantities being sent to Mirzapoor. The seed generally sown is in the last ten days of June and first ten days of July, and the gathering begins in the first week of November, when it is collected invariably almost once a week, and the whole gathered in January. The crop is an annual one, and the plant is never allowed to remain on the ground after it has been gathered.

‡ Tehseel Meerut,	...	5,513
„ Haupper,	...	7,065
„ Barouta,	...	7,957
„ Ghazeeabad,	...	7,331
„ Sirdhana,	...	5,097
„ Mowanna,	...	3,209
Total,...		36,172

Officiating Collector of Boolundshulur, No. 97, dated 21st December 1861.—About 15,000 acres of land are assigned to cotton cultivation. The average produce of "Rooee" (cleaned cotton) is 2 maunds per acre, of "Kupas" (cotton with seed in it) 6 maunds per acre; value at the market of the former is Rs. 10 per maund, of the latter Rs. 2-8-0; estimated proximate value at this rate of the entire crop in the district is, cleaned cotton Rs. 3,00,000; kupas Rs. 2,25,000. Of this about one-third is retained for home consumption and two-thirds are exported to Chundowsee (Moradabad), Hatrass (Allygurh), and Mirzapore. The usual and best period for sowing is at the end of June, and the

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beginning of July, after the first fall of rain; when it is gathered from the middle of October to the end of December. The crop is an annual one, and is by no means allowed to remain standing beyond the end of the year.

Collector of Allygurh, No. 5, *dated* 31*st January* 1862.—The total number of acres appropriated to cotton is 1,65,392; and the average produce per acre is 1 maund 6 seers 6 chittacks, the market rate of which is Rs. 10-5-0 per maund. The estimated proximate value of the entire crop at the above rate is Rs. 19,63,046. The quantity exported to other Districts, viz., to the markets of Mirzapoor, Cawnpoor, Furruckabad, Kassgunge, &c., is estimated at 1,56,573 maunds of the material, leaving 8,819 maunds for home consumption. The sowing commences in June or July, just as the rains set in, and the harvest gathered from October to end of December, the crop being an annual one always. The Collector recommends that a supply of Macarthy's gins, of £3 value, say 10 for each of the cotton-growing districts, be procured at Government expense and let out to zemindars or merchants who may be induced to try their efficiency.

Officiating Collector of Bijnour, No. 378, *dated* 19*th December* 1861.—About 22,328 acres are devoted to cotton cultivation in the Districts, the produce per acre at an average is 3 maunds of seed, and one maund 20 seers of cotton. The cotton sells at Rs. (9) nine per maund, and the seed at one maund eight seers per Rupee, thereby giving a return of Rupees 13-8-0 per acre on the cotton, and Rs. 2-8-0 per acre on the seed, showing the total value of the whole cotton Rs. 3,01,428, seed 55,820, Rs. 35,74,248. The seed is nearly all consumed in the District. Of the cotton, about one half is used in the District, and half exported—mostly to Dhanourah and Chundowsee, in the Moradabad District, from whence it finds its way to Futtehgurh, Cawnpoor, and Mirzapoor through the hands of the large traders. The end of June or commencement of July is considered the best period for sowing cotton, as the crop is usually gathered in October, and is an annual one always.

Officiating Collector of Moradabad, No. 537, *dated* 20*th December* 1861.—In the Khurreef season, in the month of Assar, is the cotton cultivated; it is collected in October and November, and is an annual crop.

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Tehseeldarees.	Land devoted to Cotton cultivation in Acres.	Produce of Cotton per Acre.	Rate of Cotton.	Total Value of Cotton.	How disposed of.
		Mds. S.		Rs.	
Moradabad, ...	5,000	1 0	10 Rs. per Md.	(a) 50,000	(*a*) About two-thirds is used by the local inhabitants, and one-third exported to Chundowsee.
Sumbhul, ...	3,500	1 0	9 do.	(b) 31,500	(*b*) Partly used by the local inhabitants, and a portion exported towards the east.
Billaree, ...	5,000	2 10	10 do.	(c) 1,25,000	(*c*) About 14,000 maunds are exported to Furruckabad and Mirzapoor annually, out of the local produce and imported supplies.
Amroha, ...	5,000	1 13	8 do.	(d) 53,000	(*d*) All used in the pergunnah.
Hussunpoor, ...	4,500	2 6	8-8 do.	(e) 77,400	(*e*) All used within the district, except 1,000 maunds exported for traffic.
Thakoordwarah,	4,500	1 30	9 do.	(f) 70,875	(*f*) About 3,000 maunds are exported to Bareilly and Kumaon; the rest is used within the district.
Total, ...	27,500	0 0	0 0	4,01,775	

Officiating Collector of Budaon, No. 1, *dated* 30*th January* 1862.—From 50 to 55,000 acres are devoted to cotton cultivation. Average produce per acre of uncleaned material about 4½ maunds, that of cleaned cotton 1-3rd or about 1½ maund. The market value of the latter article ranges from 8 to 12 Rupees per maund, according to the supply and demand. The estimated proximate value of the out-turn of 55,000 acres of cotton, valued at 8 Rupees the maund, will give Rs, 6,60,000 at the higher rate of 12 Rs. 9,90,000, at the mean of those two prices, or 10, Rs. 8,25,000. About one-fourth of the season's crop is retained for local consumption and for transport to immediate neighbouring Districts where the supply is less. The rest all finds its way down to Mirzapoor *vid* Futtehgurh. The latter end of June or beginning of July, after the first fall of rain, is the time for growing; and the picking commences early in October. The crop is always an annual one.

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Collector of Bareilly, No. 13, *dated* 11*th January* 1862.—About 30,000 acres are devoted to cotton cultivation, the average produce per acre being 7 maunds 32 seers with seeds, and 2½ maunds without them; value 26 Rs. at Rs. 10-6-0 per maund, showing a total value of the entire [cotton of the district to be Rs. 7,78,125. The cotton produced is not sufficient to provide for itself; supplies are received from other districts. The period for sowing cotton is July in every year, and it is gathered in November and December, the crop being usually an annual one.

Collector of Shahjehanpoor, No. 1, *dated* 21*st January* 1862.—Nearly 8,000 acres are assigned to cotton cultivation. The average produce per acre is about 22 seers; the market value is 3¼ seers per Rupee, making the value at this rate of the entire crop to be Rs. 54,150. It is not sufficient to meet the consumption of the district. The period for sowing is June and July, when the harvest takes place from October to December; the crop being always an annual one.

Senior Assistant Commissioner of Kumaon, No. 7, *dated* 10*th January* 1862.—The cotton cultivation may be roughly estimated. Almorah Tehseel, 600; Kumaon, 30; and Bhabur 100 acres. Total 730 acres. About 4 maunds of uncleaned cotton are yielded by each acre, which will produce about 1 maund of cleaned cotton. It has scarcely any definable market value, the small quantity grown being almost entirely for home consumption. About 3 seers per Rupee for cleaned cotton may be taken as a fair average, which would show the value of the entire crop about Rs. 9,700. From the Bhabur a very small quantity of cotton findsits way through bunneahs of Casheepoor, Juspoor, &c., to the weavers of the Rohilcund Towns. It is sown at the commencement of the rains, and gathered from October to December; the crop is an annual one.

Senior Assistant Commissioner, Gurhwal, No. 202, *dated* 26*th November* 1861.—No cotton is grown in the district, the small quantity consumed being imported from the Plains. Wool and hemp are used in lieu of it.

Officiating Collector of Muttra, No. 160, *dated* 11*th December* 1861.—During the present year (1861-62) 68,272 acres have been devoted to cotton cultivation. The average produce in the district is about 1 maund 7¼ seers per acre. The market rate of cleaned cotton may be assumed at 8 Rs. per maund, although the present price (in consequence of the supposed large demand) is about Rs. 8-8-0 per maund. The entire crop at this rate may be estimated at 80,645 maunds, which would assign a value of about Rs. 6,85,482, or at the average, Rs. 8 per maund, Rs. 64,5,160. Of the usual crop, 62,953 maunds are exported beyond the confines of the district, and about 17,727 maunds retained for home consumption. In the villages, as a rule, the bunneeahs purchase cotton, and sell it either to larger dealers in the towns of Koosi, Shergurh, Muttra, Julleisur, and Souk, or send it to Agra or Hattrass, from whence the cotton is forwarded on to Ghazeepoor and Mirzapoor. The period for sowing is invariably the commencement of the rainy season, in the month of June. Its gathering begins early in October to the end of December, though the tree continues bearing till the end of February. As the plant is annual, it is generally in succession to a rubbee crop. A large portion of the district is peculiarly well adapted for the cultivation of the plant, while the more valuable crops, such as Sugarcane and Indigo, cannot be grown on account of the brackish water, which materially assists in producing a fine cotton harvest. The Collector is of opinion that advances from capitalists, with instruction in the method of cleaning cotton, would rapidly induce cultivators to devote a very large area to this crop.

Collector of Furruckabad, No. 126, *dated* 20*th March* 1862.—9,931 acres are devoted to cotton cultivation. The average produce per acre is 1 maund 19 seers 5 chittacks, the market price being 3 seers 15 chittacks for the Rupee, or Rs. 14-13-0

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per produce of each acre. The estimated proximate value of the entire cotton crop is Rs. 1,49,675-2-5. A large quantity of the cotton is used in the district itself, some of it being exported to Oude, Shahjehanpore, and Cawnpoor. The whole produce of the district may be estimated at 14,734 maunds, of which perhaps 7,000 maunds are exported. The best season for sowing is in the month of June; the cotton is gathered in December and January, the crop being always an annual one.

Collector of Mynpoory, No. 22, *dated* 21*st February* 1862.—19,048 acres 2 roods and 24 poles are devoted to the cotton growth. The average produce per acre of cleaned cotton is 64 seers, valued at Rs. 16, and the total estimate out-turn of the crop, at this rate, Rs. 2,74,768. It is usually exported to Cawnpoor, Shahgunge, Furruckabad and Ghazeepore, and is frequently sold in great quantities within the district, and bartered for grain, &c., by the cultivators. The period for sowing is from July to August, and the reaping from November to January every year, as the crop is an annual one.

Collector of Agra, No. 14, *dated* 26*th March* 1862.—About 73,826 acres are under cultivation, its estimated proximate value is Rs. 9,33,875. It is sold in the Agra, Penahut, and Ferozabad bazars, and sent to Oudh and Mirzapoor; the best period for sowing is from 14th May to 14th June, and for gathering from October to December. The crop is an annual one.

Officiating Collector of Etawah, No. 53, *dated April* 1862.—46,803 acres are devoted to cotton cultivation; the average produce per acre is 1 maund 35 seers, valued at the market rate Rs. 7-8-0, and the estimated proximate value at this rate of the entire crop is Rs. 3,51,022-8-0. Three-fourths of the total out-turn is usually exported from the district, the remainder being retained for home consumption, and sold in the district markets. The usual period for sowing the crop is in July. It is usually gathered in October and November, the crop being an annual one.

Deputy Collector of Etah, No. 50, *dated* 28*th March* 1862.—25,891 acres are under cotton cultivation. The average produce per acre is Rs. 3 per maund, and the value of the entire cotton crop at this rate is Rs. 3,10,692. Out of 1,03,564 maunds produced, about one quarter is consumed in the district; the rest is sent to Furruckabad, Cawnpoor, and Mirzapoor, but the amount that goes to each varies and depends on the demand at these places. The best time for sowing is in the end of June or beginning of July, and in October and November is the crop gathered. It is an annual one.

Collector of Cawnpoor, No. 109, *dated* 13*th March* 1862.—63,000 acres are assigned to the cultivation of cotton; 1 maund 10 seers is the average produce per acre, at the average value of Rs. 13 per maund, making the value of the entire crop of 78,750 maunds Rs. 10,23,750. About one-fourth of the crop is consumed in the district, and the remainder is exported to the marts of Shahgunge in Oude, and Mirzapoor, of which about one-third goes to the former, and two-thirds to the latter thus—district consumption, maunds 19,687; Shahgunge, maunds 19,687; Mirzapoor, maunds 39,376. The cotton is sown in the latter part of June and first half of July, and is gathered in December. It is an annual crop.

Officiating Collector of Futtehpoor, No. 28, *dated* 27*th January* 1862.—24,700 acres are devoted to the cotton growth, and the average produce per acre is 26 seers 11 chittacks. Its value at market rate is Rs. 12-6-7, showing the estimated proximate value of entire crop to be Rs. 2,04,785. About one-third is consumed in the district, and two-thirds exported to Mirzapoor, &c., in the East. The season for sowing is that of Assar or July; that for collecting, from October to January. The crop is an annual one.

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Collector of Banda, No. 1295, *dated 27th November* 1861.—Cotton cultivation extends over 89,022 acres. The yield per acre varies considerably in amount, and the want of a fixed standard of weight throws increased difficulties in the way of forming a satisfactory estimate, but probably 25 seers per acre will be a fair estimate, The rate also changes from year to year in different parts of the district, for in obtaining a maund of clean cotton the charges are Rs. 12-8 to Rs. 13 as a fair market price, which may be taken under ordinary circumstances. The estimated value of the entire crop at this rate would be Rs. 7,23,307. Of this total out-turn about seven-eights is exported, and the rest remains for district consumption. The principal cotton marts in the district are—Banda itself; Googowlee, in pergunnah Pylanee; Gookhea and Bissenda, in pergunnah Seonda; Kallinger and Orun, pergunnah Budousa; and Rajapoor in pergunnah Cheeboo. But as a mart for cotton, Banda has of late years greatly declined and been superseded by Rajapoor, through which place probably three-fourths of it exported passes. The sowing takes place in the month of Assar or July, commonly after the first fall of rain. The ground is manured if the ryot can afford it, and ploughed only once or twice, when it is weeded (not watered) while the crop is springing up, during August and September and beginning of October; the gathering takes place after this to the end of December, and the crop is always an annual one, fresh seed being invariably sown. Cotton cultivation in the different pergunnahs is as follows :—

Name of Pergunnah.	Total cultivated area in acres.	Cotton cultivation in acres.	Percentage of cotton cultivation on cultivated area.
Banda,	1,44 303	8,759	6·07
Pylanee,	1,46,083	9,730	6·6
Ougassee,	1,35,468	8,298	6·1
Seonda,	1,08,712	5,684	5·2
Dursenda,	1,24,260	14,779	1·2 nearly
Cheeboo,	97,011	9,947	1 02
Tirohan,	78,878	17,297	2·2 nearly
Budousa,	1 20,837	14,528	1·2
Total,	9,55,552	89,022	9·3

Collector of Allahabad, No. 20, *dated* 11*th January* 1862.—About 27,000 acres are devoted to the cultivation of cotton :—

Trans-Jumna,	22,900
Doab,	4,000
Trans-Ganges,	100
	27,000

The average produce of each acre is nearly 2 maunds 6 seers, and its market rate about Rs. 12, thus making the estimated proximate value of the entire crop to be almost Rs. 3,24,000. A small portion of the cotton yield is retained for home consumption, and the rest exported as follows:—

Calcutta,	75 per cent.
Jounpoor,	10 „ „
Goruckpoor,	5 „ „
Ghazeepoor,	5 „ „
Oudh,	5 „ „

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The period for sowing is July or the commencement of the rains, when it is gathered from the middle of October to the end of November, except that "Radhea," another description sown at the same time with "dhal" ("Urhur") is not reaped till the June following. Although this cotton is little in quantity, its quality is superior. The crop is an annual one, and never allowed to remain standing for a second or third year.

Collector of Goruckpoor, No. 27, *dated* 19*th November* 1861.—No cotton is grown in the district.

Collector of Azimghur, No. 529, *dated* 20*th November* 1861.—There is no regular cotton cultivation in the district. A ryot may now and then rear a few plants for his own use, but there is no such thing as a field or any trading connected therewith carried on.

Collector of Jounpoor, No. 31, *dated* 23*rd December* 1861.—The district is not a cotton-growing one, an acre of land scarcely being devoted to its cultivation, except that it is sown with "Urhur" or round the edges of fields, and of an inferior quality called "Munnooa." From 2½ to 10 seers per acre is all that is procured. It sells at 6 annas per seer in the bazar or Rs. 15 per maund. It is all consumed in the district and mostly made up into cloth for the cultivators by either village or itinerant weavers. The crop is sown in June, in the commencement of the rains, and allowed to stand for about 11 months. It is gathered as it ripens. The produce is an annual one; and the great mart for cotton in the district is Shahgunge, which is supplied from Kalpee and other places, chiefly Mirzapoor, from whence it passes on to Azimghur and Goruckpoor.

Collector of Mirzapoor, No. 62, *dated* 13*th February* 1862.—2,848 acres are devoted to the cotton growth; the average produce per acre is 24 seers, and the total produce may be roughly estimated at 2,000 maunds. The rate in the market varies from Rs. 14 to 16 per maund; therefore, at an average of Rs. 15, the value of cotton fit for exportation would be Rs. 3,000. It is sown in the beginning of July, and reaped in December, being an annual crop always.

Collector of Benares, No. 18, *dated* 13*th January* 1862.—No cotton crop is grown in the district.

Officiating Collector of Ghazeepoor, No. 595, *dated* 21*st December* 1861.—About 1,500 acres are cultivated with cotton, the average produce per acre is near 10 seers, but not sold in the market; if so, the price probably would be Rs. 13 the maund, and the proximate value of entire crop about Rs. 4,500. The cotton is usually applied by the cultivators to their own requirements, but at times exchanged for tobacco, &c. The period for sowing is that of Assar, *i. e.*, from 15th June to 15th July, when the crop is gathered between the 15th April and 15th June, being an annual one.

Deputy Commissioner of Jaloun, No. 21 *A., dated* 21*st November* 1861.—The Deputy Commissioner forwards a copy of a report sent to the Manchester Association, to the effect that cotton to a large extent is cultivated in the district. The plant grown in Bundelcund, south of the Betwah river, is considered very superior. About the towns of Koonch and Jaloun cotton of the best quality is obtained; as is ascertainable, nearly 6,000 acres are devoted to the cotton growth. The amount of produce may be estimated (when the rains are plentiful) at 70,000 maunds, and the average produce per acre as follow:—

Seed, ...	10	lbs.
Produce, cotton raw, ...	320	lbs.
Ditto, spun, ...	80	lbs.
Rubar next in richness to Koonch and Jaloun, yields per acre,		
Cotton raw, ...	240	lbs.
Ditto, spun, ...	60	lbs.

Cotton Cultivation in the North Western Provinces.

Purwah, another good description of sandy soil, requires irrigation, when it produces abundantly. Yields:—

Cotton raw,	---	...	...	160 lbs.
Ditto spun,	...	...	...	40 lbs.

The heat in the district is very intense from 1st April to 15th October; the rainy season sets in at the end of June (when the plant is sown) and continues to the 1st of October. The cotton growth would be greatly extended if European agency, European energy, and European capital were brought into the market. About 20 per cent. is the probable consumption of the Natives, and the rest available for export. It is bought up generally by agents from the large Native firms at Mirzapoor, who depute men to make advances to the cultivators at the sowing time, when in January and February the cotton is got and taken to Calpee, and from thence shipped by boats to the above place. The price in the gathering season for cotton (clean) is Rs. 10 to Rs. 12 the maund, and at the beginning of November, before the new crop is produced, it runs up to Rs. 15 and Rs. 18 for 80 lbs.

Deputy Commissioner of Jhansie, No. 439, *dated* 15*th March* 1862.—27,215 acres are devoted to cotton growth. The produce is from 1 maund to 1½ maunds per acre, and sells at Rs. 10-8 per maund. The value of the crop of the district is therefore about Rs. 2,69,419. The cotton is consumed in the district itself. The time for sowing is the end of June and beginning of July, and that for gathering the end of October until December. The crop is always an annual one.

Deputy Commissioner, Lullutpoor, No. 82, dated 22nd March 1862.—About 2,000 acres are devoted to cotton cultivation. The average produce per acre is about 1 maund of uncleaned and 10 seers of cleaned cotton. The cotton produced is used in the district itself. The best time for sowing it is in the early part of the rainy season, that for gathering during the months of October, November, and December. The crop is an annual one.

Collector of Humeerpoor, No. 1001, *dated* 20*th December* 1861.—38,400 acres are devoted to cotton cultivation. The average produce per acre is 30¾ seers; value of which at market rate is 11½ Balashaee Rupees the maund, which is nearly 9 Rupees, and the estimated proximate value of entire crop Rs. 3,45,600. About one-third is disposed of in making clothing, &c., and the remainder exported to Mirzapoor, Shahgunge, viâ Banda or Calpee. The sowing of the crop is usually in Assar, in the month of July, and the gathering from the end of October to the close of the year, the crop being an annual one.

I am, &c.
G. H. M. BATTEN,
Secretary.

(COPY.)

From Collector of Allygurh, to Secretary Sudder Board of Revenue, North Western Provinces, Allahabad, (No. 5.)—Dated Camp Vinser, the 31st January 1862.

SIR,—As requested in your Circular Order, No. E. E., dated the 11th of November 1861, I have the honor to append the information called for respecting the Cotton crop of this season in this district, and for convenience of reference, I have embodied it in a tabular form.

2. The total area cultivated with cotton is set down at 1,65,392 acres, the average rate of produce per acre 1 maund 6 seers 6chittacks, and the average selling rate during the past month at Rs. 10-5-0 per maund, derived from the existing rate of each Tehseelee.

Cotton Cultivation in the North Western Provinces.

3. The estimated proximate value at the above rate of the entire Cotton crop is Rs. 19,63,046. Of this, however, 1,56,573 maunds are given as the estimated amount exported to other districts, valuing Rs. 16,14,659, and leaving only 8,819 maunds, or about a little more than 5 per cent. of the whole produce for home consumption.

4. The figures shewn must be taken merely as a rough approximation, the Cotton merchants and brokers of the principal marts in the district supplying the Tehseeldars with such information as they possess regarding the probable out-turn and amount likely to be exported.

5. It will be seen that nearly 95 per cent. of the entire supply proceeds eastward, and mainly to the markets of Mirzapoor, Cawnpoor, Furruckabad, and Kassilgunge.

6. The Cotton sowing commences in the months of June and July, early or late, according to the time the rains set in, and the harvest is gathered accordingly from October to the end of December on the cob bursting, and thereby shewing the cotton to be ready for picking.

7. The crop of this part of the country is an annual one, no produce resulting on the plant being allowed to remain a second year. With the kind known as " Narma," the plant, I am told, realizes something the second year; but "Narma" is not sown in this district, the soil I imagine, being unsuited to it.

8. In addition to the above information, which has been called for by the Board, I beg to offer a few more remarks which may be of use, touching generally on the Cotton cultivation as pursued in this district, and shewing the state of the present season's crop compared with those of the past two years.

9. There is only one sort of Cotton plant in this district, known as " Bunn kupas." Its quality is declared by native brokers to be better, from being whiter and cleaner, than the produce of the other districts in the Meerut Division realizing 8 annas per maund more.

10. The American variety is neither grown nor known in the district; no foreign seed is introduced, but the indigenous seed is re-sown. With this seed the people are satisfied; but in it we have full evidence of the poorness of the fibre produced; and in the degenerating effect of repeatedly using the same seed on the same soil, we see the real cause of the least value attached to Indian Cotton compared with other Cottons in use in England, as demonstrated in the photographs circulated by the Manchester Cotton Supply Association for exhibition to cotton-growers-in this country.

11. Doubts have been entertained by some Natives of the advantage derivable from the cultivation of the American Cotton; the merchant looks to the amount of profit to be gained by it. The American kind is thought to be lighter in weight than the country-grown Cotton, and the amount produced to be about the same or less in both, hence an apprehension of less profits arising from the lighter quality. But this fear is unfounded. There is a general ignorance on the merits and capabilities of the American Cotton. If the Native capitalists could be only convinced by practise that the American quality, if *only equally* productive with the country-grown, would fetch higher prices, there is little doubt of their being induced to adopt it.

12. In a good year the highest out-turn is stated to be nearly 4 maunds per acre on good ground, and an average crop of about 3½ maunds per acre: hence it will be seen that the crop of the present season has been far short o an average one. This

Cotton Cultivation in the North Western Provinces.

has been caused, I am told, by the excessive rain that fell last year, the moisture not admitting the soil to be properly cleared of grass and weeds, whose consequent exuberance checked the growth of the Cotton plant and affected materially the yield of Cotton.

13. The sale of Cotton in this district is conducted chiefly through native brokers, the system of advances to the cultivator, as pursued with Indigo, is resorted to but little.

14. Without irrigation from wells or canals, the plant is not produced, and preparing and manuring the land is necessary to promote healthiness. When Cotton is purchased from the cultivator direct, it may be had 6 or 8 annas per maund cheaper than in the market.

15. This district is singularly fortunate in the channels it possesses for the export of Cotton, having two roads connecting Coel, its central town, with the Ganges, one of which is metalled throughout and the other for nearly half its extent; two metalled roads communicating with Muttra, and Agra, and the Jumna River, and another unmetalled, the Grand Trunk Road intersecting it, east and west, and the Ganges Canal running north and south, with its two branches striking off at Nanoun, on the Trunk Road, towards Cawnpore and Etawah.

16. The cost of carriage to Ramghât on the Ganges, 26 miles from Coel, was in 1860 two annas per maund; to Furruckabad by the Trunk Road, 6 annas; to Cawnpoor, 8 annas; and to Mirzapoor 14 annas.

17. At the beginning of the past year (1861), the carriage was cheaper, being the same to Ramghât, but two annas less to both Furruckabad and Cawnpoor, and three annas less to Mirzapoor. The difference in the costs of the past two years is ascribable to the fuller development of commerce, and the call for carriage ceasing for Military purposes, as compared with former years since the disturbances of 1857.

18. The hope of increased profits—founded on the knowledge of the Cotton supply in Europe being cut off by the war in America, and stimulated doubtless by the promulgation last year of the State Paper informing native Capitalists and the public of the present state of the Cotton trade—has been the means of extending the cultivation of Cotton considerably in excess of past years.

19. The cultivation n 1859 is stated to have been 1,83,000 pucka beegahs, more or less equal to 10,4,212 acres, and the cotton yield some 3,66,000 maunds; and in 1860, the cultivation amounted to 51,500 pucka beegahs, or 29,297 acres, yielding some 51,500 maunds of cotton.

20. The above comparative results demonstrate one fact, that little certainty can be placed on either the Returns of the extent of cultivation or the amount of produce reported, the average rate of yield per acre being recorded as two maunds in 1859, one maund in 1860, and one maund six seers six chittacks in 1861. Allowance, however, should be made for the extreme drought of 1860, which rendered futile in many instances the attempts to obtain a crop; whole fields might be seen bearing short, stunted plants with little or no cobs upon them. The previous year was more favorable in every respect, hence the larger rate of produce given; and in 1861, the very heavy rains operated to diminish the supply on an extended area, hence the variable feature in the rate of produce per acre.

21. Connected with this subject is the disapprobation of European Cotton-spinners of the Cotton cleaned in this country. The "churka" is the only machine use in by Natives for this purpose. For simplicity and cheapness, it would be no easy

Cotton Cultivation in the North Western Provinces.

matter to find a substitute that would clean and separate the cotton from the seed better, and its general use from time immemorial would throw difficulties in the way of its substitution by any other machine among a people so attached as the Natives of India are to the *modus operandi* of their forefathers.

22. It would be very desirable to introduce into the country a simple Gin on the M'Carthy principle, whose price, as shewn by the Cotton Supply Association in their Secretary, Mr. Haywood's, Statement of December 1859, would easily come within the means of Native Capitalists *; but as one man will clean some 20 seers of Cotton a day with the "churka," the Gin, to supplant the "churka," should be of such size as will prove remunerative. The smaller size, priced at £1 10S. by the Cotton Supply Association, would be useless, its daily out-turn per man being set down at 15 or 24 lbs. according to the weight of the staple. The Native would in preference, then, stand by his churka.

* Or some such Gin as has been experimentally introduced by the Agri-Horticultural Society, Bengal.

23. I would propose that a supply of M'Carthy's Gins of £3 value each or more, say ten for each of the Cotton-growing districts,—be procured, at the expense of Government in the first instance, and let out on moderate terms for the first year or so to such zemins or merchants who may be induced to try their efficacy. I feel confident they would all be sold within a short time, and Government be re-imbursed its primary expenditure, for it should be borne in mind that that man would command the market whose goods would be the first ready for sale.

24. I trust I shall be pardoned for going at length into this subject, and exceeding the limits of the Sudder Board's enquiries. The extension of Canal Irrigation is engaging the attention of Government for the greater development of the resources of the country, and each year hereafter, with improved finances, we may expect to see more land thus brought under cultivation. The greater the encouragement afforded by Government by introducing fresh seed and European Machinery, the more safely may we reckon upon a larger amount of Cotton produced, and this might be effected without in any way interfering with the principles of free trade.

I have, &c.

J. H. PRINSEP,

Collector.

STATEMENT of Cotton produced in zillah Allygurh, during the year 1861-62.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
No.	Name of Tuhseel.	Lands cultivated with Cotton.	Average rate of Cotton produce per acre.	Selling rate per maund in December 1861.	What things are generally made by Cotton.	District to which it is generally exported.	How much exported to other districts.	The best months for sowing Cotton.	When Cotton is gathered from the fields.	Remarks.
		Acres.	Mds. Srs.	Rs. A. P.			Mds.			
1	Coel,	77,482	2 0	10 4 0	Native clothing, padding of quilts, quilts for cold weather, tents, floor-cloths, ropes, tape, listing for beds, &c.	Mirzapoor, Cawnpoor, Furruckabad.	1,16,223	In June or July, on the first fall of the periodical rains.	From the middle of October to end of December, or early in January, according to the lateness of the plant in ripening.	
2	Hattrass, ...	14,750	1 10	9 12 0	Do. do. do.	Mirzapore, &c., or Eastern Provinces.	15,000			
3	Eglass, ...	10,000	1 0	10 0 0	do. do.	Do. do.	3,200			
4	Tuppul, ...	5,800	0 25	10 0 0	do do.	Coel.	1,000			
5	Attrowlee, ...	7,200	1 5	10 4 0	Do. do. do.	Khasgunge, Mirzapore.	8,400			
6	Akrabad, ...	33,500	1 20	11 0 0	Do. do. do.	Mirzapore	2,500			
7	Secundra Rao, ...	4,660	0 21	11 0 0	Do. do. do.	Do.	2,250			
8	Khyr, ...	12,000	1 10	10 4 0	Do. do. do.	Eastern Provinces.	8,000			
	Total, ...	1,65,392	1 6	10 8 0			1,56,573			

ALLYGURH COLLECTORSHIP,
The 31*st January* 1862.

J. H. PRINSEP,
Collector.

Cotton Cultivation in the North Western Provinces.

From the Collector of Banda, to Secretary to Sudder Board of Revenue, North Western Provinces, Allahabad, (No. 1295.)—Dated Camp Lukkhunpoor, the 27th November 1861.

SIR,—I have the honor to forward, for the perusal of the Board, a Memorandum of answers, as regards the present year's Cotton crop, to the questions contained in your Circular No. E. E., of the 11th instant. Observing from a newspaper that these questions had been circulated by the Punjab Government, I sent them to the different Tehseeldars, and the information thus obtained has been carefully collated and embodied in the annexed Memorandum by Mr. Carpenter, Officiating Deputy Collector. Owing to the enquiry being novel, I will not vouch for the accuracy of the figures given for the Cotton cultivation area, but I hope to be more sure of the results next year.

I have, &c.

H. W. DASHWOOD,

Collector.

MEMORANDUM.

Question I.—How many acres, roughly calculated, are devoted to Cotton cultivation in each district?

Answer.—From recent enquiries, it appears that, in the present year, the total number of acres in the district cultivated with Cotton is 89,022. The area of the district in acres is 19,20,302. At this rate, therefore, about 4½ per cent. of the whole area of the district is cultivated with Cotton. The extent of cultivated land in the district is 9,55,522; Cotton, therefore, occupies rather more than 9 per cent. of the whole cultivated land. But this percentage varies in different parts of the district, the pergunnahs named in the margin producing both absolutely more cotton than the remaining pergunnahs of the district and more relatively to their size. This will be seen clearly from the annexed Statement. In Tirohan cotton occupied nearly 22 per cent. of all the cultivated land in that pergunnah. The best cotton comes from the Beergurh and Kalinger portion of the Budousa pergunnah.

Dursenda.
Cheloo.
Tirohan.
Budousa,

Question II.—What is the average produce per acre, its value at the market rate, and the estimated proximate value at this rate of the entire Cotton crop of the district?

Answer.—It is not easy to estimate the produce per acre. The produce varies considerably in amount in different parts of the district, and the want of a fixed standard of weight throws increased difficulties in the way of forming a satisfactory estimate. In no two pergunnahs is the "seer" exactly equivalent, and in many cases the variation in standards large. Another difficulty arises from the fact that in this district Cotton is scarcely ever sown singly. "Urhur," "Oord," "Tillee," are almost invariably sown with it in small quantities. No doubt if cotton were cultivated alone the average produce would be higher than it is. As it is, taking the seer of full weight, probably the average produce per acre in ordinary years does not exceed 80 seers of "kupas," that being the term for the raw uncleaned cotton with the seed. The price of "kupas" in the villages varies from 9 to 14 seers per Rupee, but this variation is due probably to the variation in the standard of weight than to any other cause. From 10 to 11 full weight seers for the Rupee may be taken as the average price of "kupas" over the whole district. This would give nearly Rs. 8 as the average value of the produce of an acre, and rather more than Rs. 3 as the value of the produce of a beegah. [This estimate must be near the mark, because from Rs. 3 to Rs. 4 is the sum at which the people themselves estimate the value of the produce of the beegah of cotton.] Something, too, must be allowed for the produce of the

urhur or other crop sown with the Cotton. The estimate cannot be too high, because if it were Cotton would be less remunerative than other crops, which it certainly is not. In the process of cleaning or extracting the seeds by the "churka," the raw Cotton loses from two-thirds to three-fourths of its weight. That is to say, of the better kinds of Cotton, one seer will be obtained from three seers of "kupas," the remaining two seers being "binoula," or seed. In the inferior qualities it requires four seers of "kupas" to produce one of Cotton. It follows, then, that if we assume the average produce of an acre sown with the Cotton to be eighty seers of "kupas," the average produce per acre of "rooee," or clean Cotton, will be between one-third and one-fourth of that quantity. Probably twenty-five seers per acre will be a fair estimate. But this estimate is for ordinary years, as the present must be considered an exceptional year, the Cotton crop having in many parts of the district been much injured by the heavy rain-fall in September. As a general rule, the "kupas" is cleared of seed and prepared for the market by the ryots themselves; but sometimes traders buy up the raw material in large quantities, and pay for its cleaning by hired workmen. In this case the workmen are paid in proportion to the amount of clean Cotton produced. The rate varies from year to year, and differs in different parts of the districts. For producing a maund of clean Cotton the rate is sometimes as low as six or eight annas, and sometimes rises as high as one rupee; eight annas may perhaps be taken as an ordinary rate. The Cotton seed, or "binoula," obtained by passing the uncleaned Cotton through the "churka" may be valued at about one rupee per maund. We thus have data for calculating the cost price of a maund of clean Cotton of the best quality, as follows:—

		Rs.	As.	P.
Cost of 120 seers of kupas, at 10 seers per Rupee,	...	12	0	0
Cost of cleaning by "churka,"	...	0	8	0
		12	8	0
Deduct price of two maunds of seed, at one Rupee per maund,	...	2	0	0
		10	8	0

We thus obtain Rs. 10-8-0 as the cost price of a maund of clean Cotton. Allowing for the trader's profits and cost of carriage, we have from Rs. 12-8-0 to Rs. 13 as a fair market price under ordinary circumstances. This happens to be exactly the price of Cotton at the present moment in the markets of the district. Taking, then, the average produce per acre of clean Cotton at 25 seers, and Rs. 13 as the price per maund, we get the following estimate of the out-turn of the district in maunds and its value:—

Area cultivated with Cotton.	Estimated in Maunds.	Estimated Value.
Acres 89,022	55,639	7,23,307

This represents the out-turn and the value in ordinary years. Probably in the present year the out-turn will not be much above 50,000 maunds, which, at Rs. 13 per maund, will be worth Rs. 6,50,000. But the price will no doubt rise, both from the scantiness of the crop and the Manchester demand, so as to make the value considerably higher than this.

Question III.—How is the Cotton grown in the district usually disposed of; and if exported, to what places, and ordinarily to what amount?

Answer.—Of this total out-turn probably about seven-eighths exported, and the rest remains for district consumption. All the Cotton that is exported passes either through Chilla, on the banks of the Jumna, in pergunnah Pylanee, or through Rajapoor, on the

Cotton Cultivation in the North Western Provinces.

Jumna, in pergunnah Cheloo. The principal Cotton marts in the districts are Banda itself, Googowlee in pergunnah Pylanee, Gookhea and Bisenda in pergunnah Seonda, Kalinger and Orun in pergunnah Budousa, and Rajapoor in pergunnah Cheloo. As a mart for Cotton, Banda has of late years greatly declined and been superseded by Rajapoor, through which place probably three-fourths of the Cotton exported passes. From Chilla and Rajapoor the Cotton is shipped in river boats, and carried to Mirzapoor and Ghazeepoor. The average cost of transport is one rupee per cart to Chilla, and Rs. 4 per cart to Rajapoor—a cart conveying from 9 to 12 maunds. The water carriage by boat from Chilla to Mirzapoor is 3½ annas per maund, and from Rajapoor to Mirzapoor from 2 to 2¼ annas per maund.

Question IV.—What is the usual or best period for sowing the crop in the District?

Answer.—The sowing takes place in the month of Assar or July, commonly after the first fall of rain. The ground is generally manured if the ryot can afford it. It is ploughed only once or twice. It is never watered, but always weeded while the crop is springing up—generally three times, but sometimes four, and occasionally, but very rarely, as many as five or six times. The weeding takes place during Sawun or August, Bhadon or September, and the beginning of Kooar or October. Cotton is generally sown on high ground in lighter soils—on the sides of ravines, for instance—or on elevated spots where the water cannot lodge.

Question V.—At what time is it usually gathered when the crop is of this year's growing?

Answer.—About the end of October the crop is generally matured; and the gathering takes place between then and the end of December.

Question VI.—Is the crop in the district usually an annual one, or is it usually allowed to remain standing for a second or third year, or for still longer periods?

Answer.—The crop is *always an annual one,* fresh seed being invariably sown. The same plants are never allowed to remain standing for a second crop, as it is the opinion of the people of the district that the plants produce nothing in the second year. In this district the same land is never cultivated with Cotton in two successive years. After a field has borne Cotton, always two, and sometimes three, years are allowed to elapse before it is again sown with that crop.

Question VII.—Answered above.

I have, &c.

H. W. DASHWOOD,

Collector.

STATEMENT showing extent of Cotton Cultivation in different Pergunnahs in Zillah Banda.

Name of Pergunnah.	Total Area in Acres.	Total Cultivated Area in Acres.	Cotton Cultivation in Acres.	Percentage of Cotton Cultivation on whole Area.	Percentage of Cotton Cultivation on Cultivated Area.
Banda, ...	2,42,983	1,44,300	8,759	3·6	6·07
Pylanee, ...	2,47,884	1,46,083	9,730	3 9	6·6
Ougasee, ...	2,32,849	1,35,468	0	3·5	6·1
Seonda, ...	1,83,483	1,08,712	5,684	3·1	5·2
Dursenda, ...	2,30,832	1,24,260	14,779	6·4	1·2 nearly
Cheloo, ...	2,02,318	97,011	9,947	4·9	0·2
Tirohan, ...	3,41,327	70,878	17,297	5·	2·2 nearly.
Budousa, ...	3,38,936	1,20,837	14,528	6·	1·2
Total, ...	19,20,312	9,55,552	89,022	4·6	9·3

H. W. DASHWOOD,

Collector.

Cotton Cultivation in the North Western Provinces

(COPIES.)

From Deputy Commissioner of Jaloun, to Secretary to the Sudder Board of Revenue, North Western Provinces, Allahabad, (No. 81 A.)—Dated Camp Calpee, the 21st November 1861.

SIR,—I have the honor to acknowledge receipt of Sudder Board of Revenue's Circular No. E. E. of 1861, dated the 11th instant, and in reply to forward copy of Cotton Statement sent to the Manchester Cotton Association through the Commissioner.

2. This Report will be found to contain information on all the points alluded to by the Board.

I have, &c.
A. H. TERNAN,
Deputy Commissioner.

JALOUN DISTRICT.

Area 2,513 *Square Miles.*—*Population* 2,46,297 *Inhabitants.*

Question 1st.—Is the Cotton plant cultivated in your District?

Answer.—Yes, to a large extent; but it is impossible to state with anything like accuracy the amount of land given up for such cultivation, particularly since entire destruction of Official Records in 1857-58. One-third of the district may be given as a proximate amount. The Cotton crop is one of the autumn crops collected in December. The seed when separated from the pods is used for fattening cattle, as also are the stems.

Q. 2nd.— What are the varieties?

A.—There are no varieties in this district; but the Cotton grown in Bundlecund, south of the Betwa River, is considered superior to that produced in this district and in the North-West in general. Large quantities are sent down, through Calpee on the Jumna, to Calcutta for shipment. In this district rich alluvial soil, called "mar," about the towns of Koonch and Jaloun, yields the best quality.

Q. 3rd.—If the American variety grows in your district, when was it first introduced, and has its cultivation increased or fallen off?

A.—Having no data to go upon, I can only state from hearsay that the American Cotton was introduced by the East India Company in the neighbourhood of Calpee under the superintendence of some American gentlemen, but from mismanagement, I believe, greatly and want of irrigation the experiment failed. At one time the East India Company had a large factory at Calpee, and bought up largely the Native Cotton for export to China and Europe. The factory was closed on the Hon'ble Company ceasing to be a Trading Company, and it was sold to a private firm, which carried on business within a few years of the late disturbances. There is every reason to believe the American Cotton would thrive in this district.

Q. 4th—Can you give the statistics, *i. e.*, the number of acres cultivated, and the annual amount of produce, also the yield per acre?

A.—As above stated no American Cotton is now grown in this district, nor can any exact statistics be as yet furnished of the number of acres cultivated, or amount of produce of even Native Cotton. As far as I have been able to ascertain from Native documents, about 66,000 acres are sown with Cotton; when the rains are plentiful, the amount of produce may be estimated at 70,000 maunds or 5,60,000lbs. The average produce is as follows per acre, seed 10lbs:—

PRODUCE.

Cotton raw,	...	...	...	320lbs.
Cotton spun,	...	...	...	80lbs.

Q. 5th.—Is it your opinion that the American plant in your district deteriorates in quality and staple each year when preserved from admixture with other varieties?

A.—From want of experience in the matter, it is impossible to answer this question satisfactorily.

Judging from the effect of the climate on American vegetables in general, I think American Cotton would deteriorate annually; but let the American plant have a fair trial before we build upon what may be an error. As I said before, a former experiment failed, but it may have been from want of experience or knowledge in those to whom this important question was committed.

Q. 6th.—What is the peculiar nature of the soil and climate?

A.—There are four varieties of soil in this district, yielding as follows:—To 10lbs. of seed sown in one acre mar or rich black alluvial soil, most favorable for Cotton, yielding raw Cotton 320lbs, spun cotton 80lbs. Kabur, next to the mar in richness, but with a greater admixture of clay. A hot sun causes large fissures to open in every direction; these absorb the water so necessary for the growth of Cotton; again, the hot wind gets to the roots of plants through these fissures and destroys them. Yields per acre, raw Cotton, 240lbs; spun cotton, 60lbs. Purwah, a good description of light, sandy soil,—requiring good irrigation, however, when it produces most crops abundantly—yields, raw Cotton, 160lbs.; spun cotton, 40lbs.

The heat in this district is very great from the 1st of April to the 15th of October or 1st of November. The rainy season sets in about the end of June, and continues till the middle of September or till the 1st of October. The average fall of rain is from 30 to 40 inches. From the 15th of November to the 1st of March the climate is good, and favorable to the European residents.

Q. 7th.—Is irrigation employed in cultivation? If not, would irrigation improve the quality and increase the quantity, and is it available?

A.—Irrigation is not generally employed in the cultivation of Cotton. The plant is sown at the beginning of the rainy season, and the mar soil retains its moisture for many months, sufficiently to keep the plants healthy. No irrigation could be used in "Kabur" soil for the fissures caused by a hot sun would absorb the whole without any benefit. Water is in this district found far below the surface; wells are consequently very expensive and little used by the cultivators. In most soils, irrigation where used produces splendid crops. During the dry season the cultivators sometimes dig temporary wells, which are allowed to fall in during the rains. I must mention that the Natives often mention an insect they call "Mahoon" as most injurious to the Cotton plant.

Q. 8th.—What is the estimated quantity of clean Cotton produced per acre, and what extent of ground could be devoted to its production?

A.—An acre of land produces about 80lbs. of clean Cotton. The cultivation might easily, I think, be doubled. The plants require continual weeding and attention. The cultivators would no doubt raise Cotton in abundance if they saw it yielded in the market a better price than wheat, which is now grown to a great extent.

Q. 9th.—Can the cultivation be extended with facility?

A.—I think Cotton cultivation could be greatly extended and with facility, but to do so you must bring into the market European Agency, Eurasian Agency, and European Capital. The Native will do nothing. Again, the laws regarding the land tenures in the country must be altered to admit the requirements of our European civilization approaching more to the nature of tenures in Europe.

Q. 10th.—Are there obstacles to its cultivation, and of what nature?

A.—I know of no obstacles to its cultivation, if proper means are used. A want of rain would no doubt bring a partial failure of Cotton crop with it; but in many instances, again, artificial irrigation might amply supply the deficiency.

Q. 11th.—What is the probable consumption by the Natives, and what the quantity available for export?

A.—About 20 per cent. is the probable consumption of the Natives, and the rest is available for export. Full and most complete returns of the Cotton produced in this district are to be found among the records of the India Office.

Q. 12*th.*—Are there any and what Merchants in your district who are buyers of Cotton from the growers, or who would buy Cotton if produced? If not, what would be the necessary Agency to employ to purchase the Cotton and send it to England?

A.—The Cotton of this district is generally bought up by Agents from the large Native firms at Mirzapoor. These depute men into the districts, who make advances to the cultivators or farmers at the sowing season, and they (in January and February) take the Cotton to Calpee, from whence it goes by water to Mirzapoor. A European Agent or Assistants, European and Native, at Calpee on the Jumna would be, I think, the best Agency to employ for the purchase of Cotton and transmission of it to England.

Q. 13*th.*—At what probable price can it be purchased clean, either at the place of growth or at the port of shipment?

A.—The price of clean Cotton in the gathering season, when it is cheapest, is from Rs. 10 to Rs. 12 for a maund or 80lbs.; and in the beginning of November, before new crop is produced, it runs up to Rs. 15 and Rs. 18 for 80lbs. The rates at the shipping ports would depend on the demand and supply, and cannot be ascertained here.

Q. 14*th.*—What are the means of conveyance from the Cotton fields to the port of shipment, and the cost per pound; and are they capable of being facilitated, and in what manner?

A.—This district is a large tract of level country. From November to July the roads are excellent, and offer no obstacles whatever to traffic. The Cotton is carried on Bullock-carts to Calpee, and there taken on boats to Mirzapoor and Calcutta. The cost is about one rupee for 80lbs. from Calpee to Calcutta. Steamers drawing little water might be used on the Jumna with great advantage to commerce, and a railroad from Cawnpore to Gwalior would give access to the wealth of this district and neighbouring districts of Bundelcund and Gwalior.

Q. 15*th.*—Are the growers supplied with good seeds, and would they attend to the cultivation of superior seeds if supplied them?

A.—The seed at present used is the produce of the district. The Native of India does not experimentalise: he only goes a beaten path. The cultivators would take no interest in the matter. When Europeans come as settlers in the land, such experiments can fairly be tested with immense advantage to the country in general as well as to individuals. Till then failure will most likely ensue.

Q. 16*th.*—Are they furnished with other machinery than the churka for cleaning or presses for baling the Cotton, or in what manner is it packed for the market?

A.—The churka is the only machine used in this district; no presses have been known since the closing of the Factory at Calpee. The Cotton is packed in common gunny-bags or large nets, and arrives in the market in a most filthy state.

Q. 17*th.*—What is the cost of cleaning Cotton per pound by the churka or other machine used?

A.—The cost of cleaning by the churka is one rupee or two shillings for 80lbs., and one man can clean from 20lbs. to 24lbs. daily.

Q. 18th.—Can and will you favor us with samples of Cotton grown in your district?

A.—Samples of best quality of Cotton produced in this district are herewith forwarded.

Q. 19th.—It being important that seed of the American variety should be saved for resowing in order to extend its growth, will you take steps forthwith to secure it in a pure and unmixed state?

A.—Should American Cotton be introduced into this district, as I said before, it must be through Agents appointed for that special purpose, and who know the language of the country and are accustomed to deal with Asiatics. No other persons can give such an important subject the attention it will require, or possses the experience and knowledge desired.

Q. 20th.—Will you please furnish samples of Cotton or goods made from Cotton by the Natives, and state the cost of manufacture and selling price?

A.—The cloths made in the district are of the coarsest description, and the population is clothed chiefly in British fabrics. The cloths of the district sell at about two annas per yard.

Q. 21st.—Will you furnish this Association with a printed or other statement of the extent of waste lands in your district, and also a sketch-map of the same on the smallest scale possible?

A.—The waste lands of the district are generally scattered in patches of no great extent here and there, and are useless for all purposes of cultivation, being from the nature of the soil unproductive, and fit for grazing cattle only. No map is consequently furnished.

Q. 22nd.—Will you favor the Committee with a detailed communication upon all the points referred to in the above questions, and generally offer suggestions as to the most effectual manner in which the trade and commerce of your district may be extended, giving special reference to Cotton, as it is proposed to publish your letter with your replies in the *Cotton Supply Reporter* (published by this Association), for the benefit both of the people of India and of this country?

A.—In answering the foregoing questions, however crudely from want of data to go upon, I have laid before the Committee all the information I have been able to procure in this district, either by my own efforts or those of the officers under me. To extend the trade of India with England, to indeed make India pay to bring out its enormous natural wealth, Europeans of energy, capital, and science must come and settle in the land. As heads of labor, they will instil into the Native gradually some wish to progress, and both parties will find their advantage in improvement. Innumerable are the products of the country, many of which are ignored or but partially known by the Natives, and only require European energy to cause their full development. Among other neglected productions are Silk, Indigo, the various Dyes, Vegetable Oils, Hemp, Jute, Safflower, Sugarcane, which only requires care to equal that of the West Indies. The wealth of India is an unexplored mine of which the surface only has been scraped. The common churka used by the Natives only costs five annas. No Native Cultivator would pay the cost of a Cottage-Gin or give Cotton in exchange; but if he saw Cotton factories springing up all over the country, then his prejudices would give way to the palpable benefit to his pocket.

I have, &c.

A. H. TERNAN,

Deputy Commissioner.

PRICES Current of Cotton from 1859 to May 1862.

1859.

Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Seharunpoor, ...	0 0 0	0 0 0	12 13 0	14 8 6	16 0 0	16 0 0	12 8 0	12 5 0	11 8 0	12 5 0	12 4 9	10 0 0
Meerut, ...	13 5 3	13 5 3	15 4 0	0 0 0	16 0 0	0 0 0	14 8 9	13 5 3	12 5 0	11 6 9	0 0 0	9 6 6
Allygurh, ...	14 8 0	14 10 0	17 0 0	17 12 5	16 0 0	14 8 0	16 0 0	17 8 0	12 4 0	11 8 0	11 0 0	10 0 0
Moradabad, ...	15 5 4	13 5 4	13 5 4	16 0 0	16 0 0	16 0 0	13 5 4	10 10 8	12 5 0	11 7 0	10 11 0	9 11 0
Bareilly, ...	14 6 4	0 0 0	15 3 0	18 9 0	20 0 0	17 8 0	16 0 0	12 12 0	0 0 0	0 0 0	9 13 9	10 0 0
Budaon, ...	16 0 0	16 0 0	14 8 9	16 0 0	20 0 0	20 0 0	20 0 0	20 0 0	13 5 3	13 5 3	10 10 6	12 9 7
Muttra, ...	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Agra, ...	0 0 0	14 0 0	16 0 0	17 8 0	17 8 0	18 0 0	16 0 0	13 0 0	11 0 0	10 0 0	0 0 0	12 0 0
Furruckabad, ...	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Cawnpoor, ...	19 0 0	15 0 0	20 0 0	20 0 0	22 0 0	18 12 0	20 0 0	13 0 0	11 8 0	15 0 0	18 0 0	12 4 11
Banda, ...	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Allahabad, ...	20 0 0	20 0 0	24 0 0	22 0 0	0 0 0	24 0 0	24 0 0	25 0 0	25 0 0	25 0 0	16 0 0	16 0 0
Goruckpoor, ...	17 12 5	20 0 0	13 5 4	13 5 4	17 12 6	17 12 5	24 9 10	13 5 4	17 12 5	20 0 0	13 5 4	11 7 0
Mirzapoor, ...	17 8 0	17 8 0	0 0 0	20 0 0	20 0 0	20 0 0	17 8 0	13 12 0	0 0 0	13 12 0	12 8 0	0 0 0
Benares, ...	0 3 0	20 0 0	22 13 9	22 13 8	22 13 8	22 13 9	22 13 9	22 13 9	16 0 0	14 8 9	14 8 9	11 7 0
Ghazeepoor, ...	16 0 0	0 0 0	16 13 6	18 4 7	17 4 9	20 0 0	24 9 10	0 0 0	20 0 0	16 0 0	16 0 0	14 8 9
Jubbulpoor, ...	0 0 0	20 0 0	14 8 9	15 3 9	16 0 0	16 13 6	14 8 9	13 5 4	12 4 11	12 4 11	10 0 0	9 6 0
Saugor, ...	20 0 0	20 0 0	16 0 0	17 8 0	17 12 0	16 0 0	18 0 0	17 15 0	16 0 0	12 0 0	10 9 6	0 0 0

PRICES Current for Cotton from 1859 to May 1862.

1862.

Districts.	January.	February.	March.	April.	May.
Seharunpoor, ...	8 14 0	8 14 0	9 0 0	9 6 0	10 0 0
Meerut, ...	8 0 0	8 0 0	8 0 0	8 0 0	9 2 3
Allygurh, ...	0 0 0	10 0 0	10 4 0	10 10 6	10 10 6
Moradabad, ...	9 6 7	9 6 7	9 6 7	10 0 0	11 6 10
Bareilly, ...	0 0 0	10 5 0	10 0 6	10 6 6	12 12 0
Budaon, ...	0 0 0	0 0 0	10 0 0	9 8 9	12 4 11
Muttra, ...	10 0 0	9 9 0	9 9 0	9 9 0	10 0 0
Agra, ...	9 12 0	9 12 0	11 0 0	11 0 0	10 0 0
Furruckabad, ...	11 0 9	10 0 0	10 0 0	0 0 0	11 7 0
Cawnpoor, ...	12 9 7	12 4 11	11 7 0	11 7 0	11 7 0
Banda, ...	10 0 0	10 8 0	10 8 0	10 8 0	12 0 0
Allahabad, ...	13 0 0	14 8 0	14 0 0	15 3 0	13 0 0
Goruckpoor, ...	0 0 0	0 0 0	14 8 9	14 8 9	14 8 9
Mirzapoor, ...	12 4 11	11 7 0	11 7 0	11 13 7	11 7 0
Benares, ...	14 8 6	14 8 6	14 8 6	14 8 6	14 8 6
Ghazeepoor, ...	16 0 0	16 0 0	16 0 0	16 0 0	16 0 0

SUDDER BOARD OF REVENUE, NORTH WESTERN PROVINCES,
Allahabad, the 24th June 1862.

G. H. M. BATTEN,
Secretary.

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